



**GOLD FIELDS**

Integrated Annual Report  
for the year ended 31 December 2015



To be the global leader  
in sustainable gold mining

# 1.1 About this report

Our 2015 Integrated Annual Report comprises the following volumes:

- › The Integrated Annual Report (IAR) 2015, which examines the integrated nature of our operational, financial and sustainability performance
- › The Annual Financial Report 2015, which fulfils our statutory financial reporting requirements
- › The Mineral Resources and Mineral Reserves Overview 2015, which provides detailed technical and operational information on our mines and growth projects
- › Gold Fields Global Reporting Initiative (GRI) Content Index for the IAR 2015

The aim of our integrated approach is to enable our stakeholders, including investors, to make a more informed assessment of the value of Gold Fields and its prospects. The IAR also forms part of our Communication on Progress to the United Nations Global Compact. A summary of our adherence to the GRI, the 10 Principles of the United Nations Global Compact and the 10 Principles of the International Council on Mining & Metals (ICMM) and its mandatory requirements of the position statements are presented online.

## Forward looking statements

Readers are referred to the forward looking statements on p148.

## About Gold Fields

Gold Fields Limited is an unhedged, globally diversified producer of gold with eight operating mines in Australia, Ghana, Peru and South Africa with attributable annual gold production of approximately 2.2 million ounces. It has attributable Mineral Reserves of around 46 million ounces and Mineral Resources of around 102 million ounces. Attributable copper Mineral Reserves total 532 million pounds and Mineral Resources 910 million pounds. Gold Fields has a primary listing on the JSE Limited, with secondary listings on the New York Stock Exchange (NYSE) and the Swiss Exchange (SWX).

### How to read this Integrated Annual Report:



*Integrated Annual Report*



*Mineral Resources and Reserves Supplement*



*Annual Financial Report*



*Global Reporting Initiative (GRI) Content Index*



Download this QR code from your smartphone to gain quick access to our website



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**Scope and boundaries of this report**

This is Gold Fields' 2015 IAR. It covers the reporting period from 1 January 2015 to 31 December 2015. The previous IAR was published in March 2015 and covered the financial reporting period from 1 January 2014 to 31 December 2014.

This IAR provides an overview of Gold Fields' eight global operations in Australia, Ghana, Peru and South Africa, as well as our exploration and business development activities. Detail on the exact location of each operation and project can be found on the global map on page 2.

We use an integrated approach to reporting that examines our operational, financial and sustainability performance. All non-financial data for 2013 exclude the Yilgarn South assets we acquired that year, unless otherwise indicated. All 2014 and 2015 non-financial data are inclusive of the Yilgarn South assets. Furthermore, all 2012 data, where stated, cover only the continued operations of Gold Fields, i.e. they exclude the contributions from the Sibanye Gold assets, which were unbundled from Gold Fields in

February 2013. This report has been compiled in accordance with the GRI's G4 Guidelines and the International Integrated Reporting Council Framework. Gold Fields also references a broad range of additional codes, frameworks and standards in compiling the report, the full list of which can be found on page 35. We believe the Integrated Annual Report, together with additional documents held online, complies with the requirements of GRI G4 Core Reporting Guidelines.

An average exchange rate for 2015 of R12.68 and A\$0.72 to the US Dollar have been used in this report. For 2016 forecasts exchange rates of R14.14 and A\$0.73 to the US Dollar have been used.

**Assurance**

Our auditors, KPMG, have provided reasonable assurance on selected sustainability information in this report, which is prepared in accordance with the GRI G4 guidelines. As a member of the ICMM we are committed to obtaining assurance in line with the ICMM Sustainable Development Framework: Assurance Procedure. KPMG has provided assurance on the four subject matters of the ICMM

(ICMM subject matter 5 is not applicable due to Gold Fields' transition to GRI G4 Core). The key sustainability performance data for assurance by KPMG in 2015 can be found on page 143.

**Board approval**

The Gold Fields Board of Directors 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 International Financial Reporting Standards. As such, the Board approves the content of the IAR 2015, including the Annual Financial Report 2015.



**Cheryl Carolus**  
Chairperson of the Board

22 March 2016



[www.goldfields.com](http://www.goldfields.com)

**LinkedIn** <http://www.linkedin.com/company/gold-fields-ltd-?trk=top-nav-home>



**Send us your feedback**

To ensure that we report on issues that matter to our stakeholders please provide any feedback and questions to: [media@goldfields.com](mailto:media@goldfields.com), [sustainability@goldfields.com](mailto:sustainability@goldfields.com) or visit [www.goldfields.com](http://www.goldfields.com) to download the feedback form.

# 1.2 Our operating environment

## Key

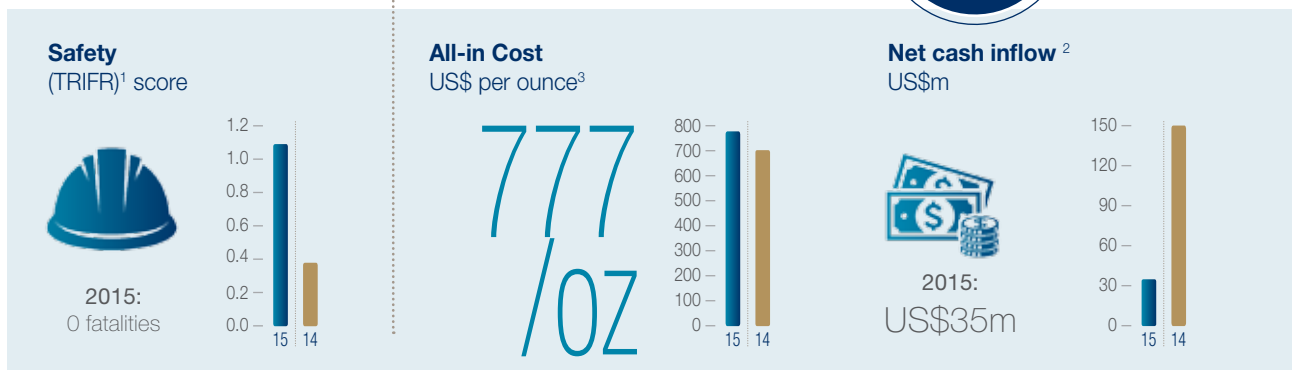
- Mines
- Corporate Office
- ▲ Regional Offices

Projects	Status
● <b>Far Southeast</b> (Philippines)	Scoping study
● <b>Salares Norte</b> (Chile)	Scoping study
● <b>Arctic Platinum project</b> (Finland)	For disposal



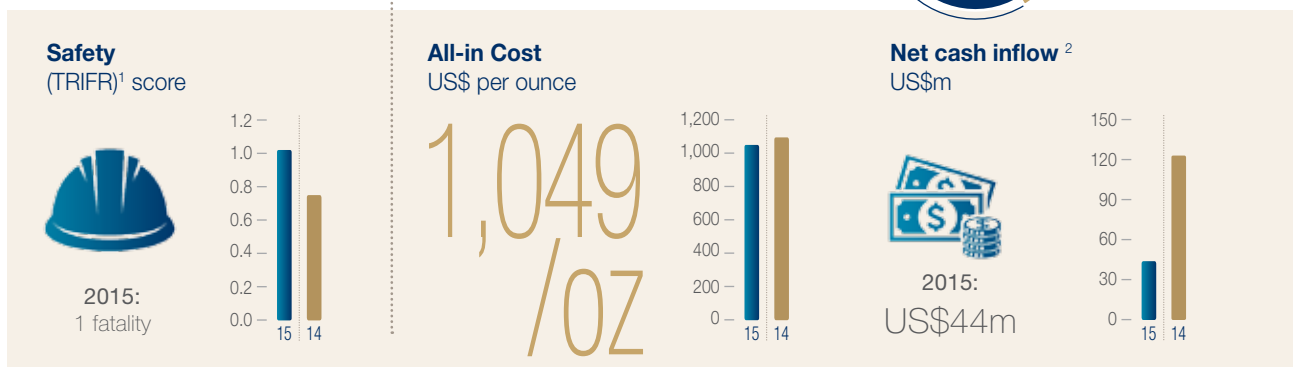
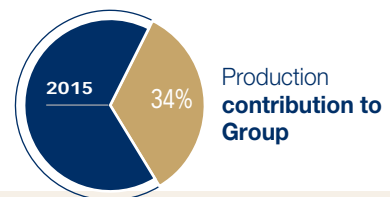
## Americas region

Gold Fields presence in the Americas region consists of the Cerro Corona mine in Peru and the Salares Norte project in Chile



## West Africa region

Gold Fields West Africa region consists of two mines in Ghana, Tarkwa and Damang



<sup>1</sup> TRIFR - Total Recordable Injury Frequency Rate (Injuries per 1 million hours worked), including employees and contractors

<sup>2</sup> Net cash flow from operating activities after taking account of net capital expenditure and environmental payments

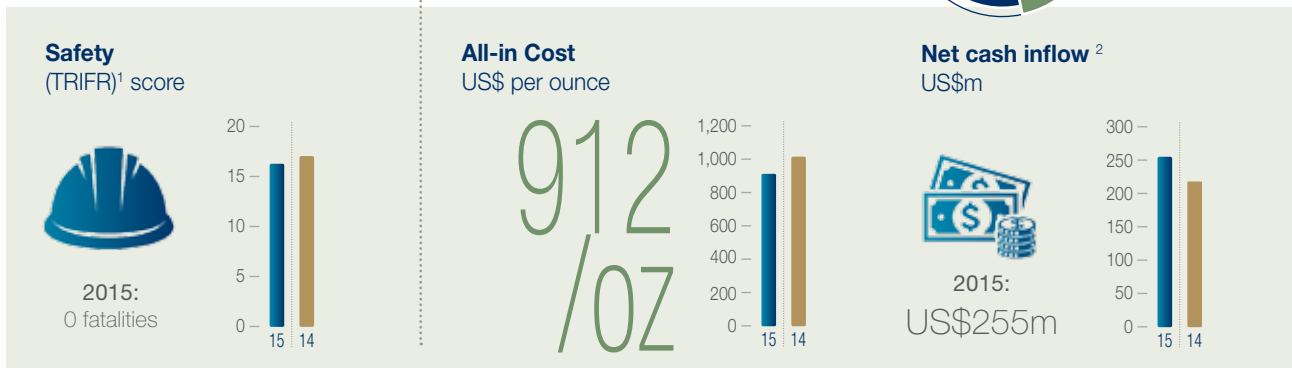
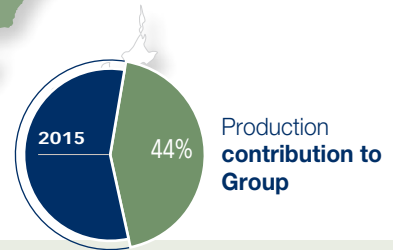
<sup>3</sup> Per gold - equivalent ounce

<sup>4</sup> The two fatalities listed were workplace accidents. A third fatality occurred involving a member of the protection services team at South Deep, who was shot and killed during a robbery at the mine



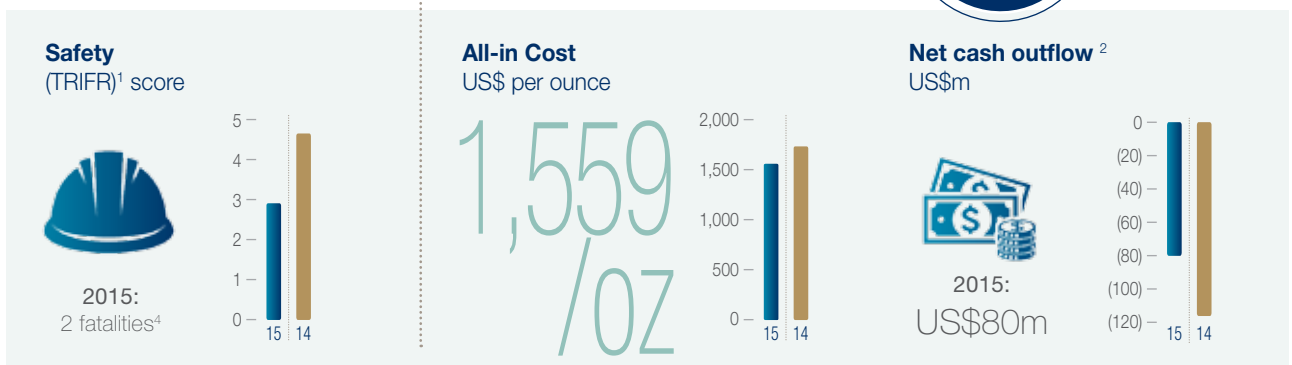
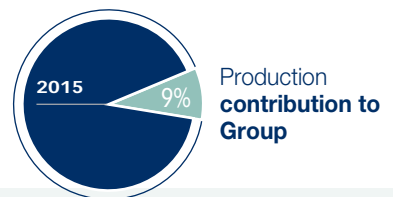
## Australia region

The Australia region consists of four mines in Western Australia - Agnew, Darlot, Granny Smith and St Ives - and the Far Southeast project in the Philippines



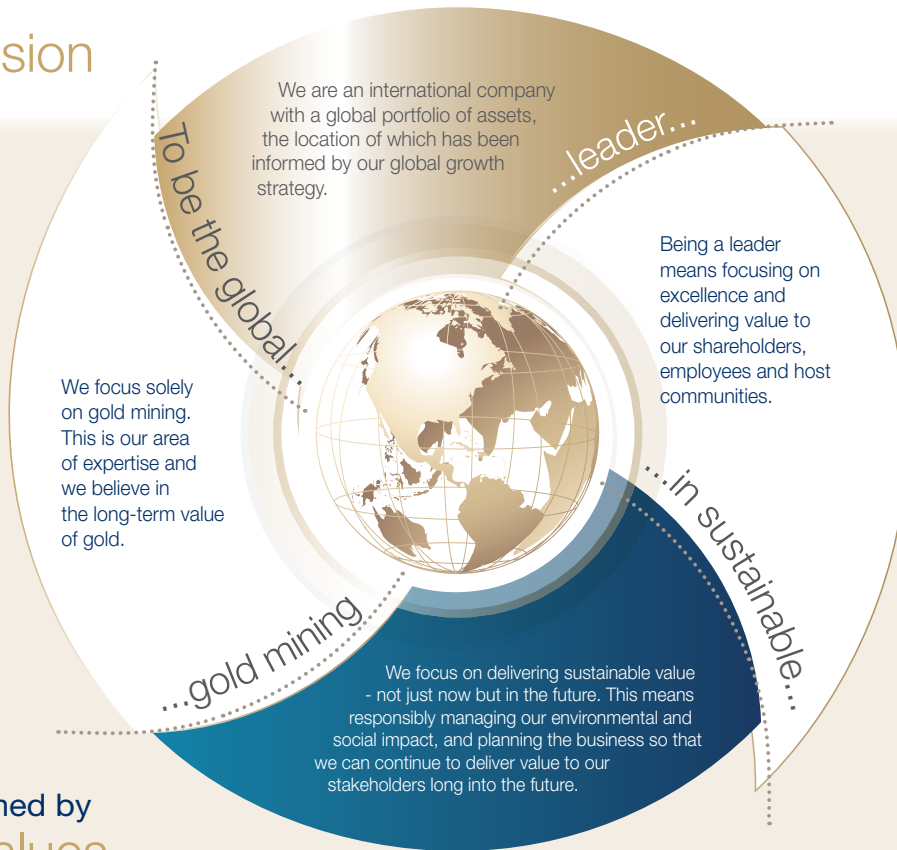
## South Africa region

The South Deep mine, which is still in a ramp-up phase, is the only operating asset in the South Africa region



# 1.3 Gold Fields DNA

## Our Vision



## underpinned by Our Values



## to deliver on our Stakeholder Charters



- |   |  |  |
|---|--|--|
| <ul style="list-style-type: none"> <li>› To be a company of which employees can be proud</li> <li>› To celebrate achievement</li> <li>› To treat employees with respect and to work with them to ensure their health and safety</li> <li>› To provide the right development and support for employees to succeed</li> <li>› With employees' help, to make Gold Fields the best place to work</li> </ul> | <ul style="list-style-type: none"> <li>› To build a quality portfolio of productive mines</li> <li>› To provide superior returns</li> <li>› To deliver on our commitments</li> </ul> | <ul style="list-style-type: none"> <li>› To build strong relationships and trust</li> <li>› To create and share value</li> <li>› To measure our actions and impact</li> <li>› To deliver on our commitments</li> </ul> |
|---|--|--|



# 1.4 Our value creation model

## How Gold Fields creates and distributes value

Gold Fields is able to create and distribute value to its stakeholders by achieving its overarching strategic objective, which is to deliver a sustainable free cash flow margin of 15% at a long-term planning gold price of US\$1,300/oz. This means we will not only invest to achieve this year's targets but also those in the years to follow.

A wide range of internal and external factors – or inputs - have either had a direct impact on or influenced the development of this strategy. Many of these inputs pose a risk to the Group, and can be directly linked to the top 10 risks on our business risk register (p46), while others are an opportunity.

At a macro level, we continually consider the global geopolitical climate and macroeconomic trends as well as the socio-economic and political environment in the specific jurisdictions where we operate. In recent years, gold price volatility and a decline in prices have had a direct impact on how we steer the business strategically, and currently pose a key business risk. Furthermore, the level of exchange rates in regions in which we operate have a material influence on our business.

Certain factors that are more directly linked to our business include the contributions and expectations of our shareholders, host communities and employees and contractors. The public and fiscal policies of host governments, and their stance on the mining industry, is a further important factor.

Our business uses a number of capitals and resources including natural, manufactured, human, social and financial capital.

All of these inputs come together to inform our strategy, which in turn is executed by:

- **Improving the quality of our portfolio:** Having a quality portfolio of assets allows us to generate the cash needed to meet our objectives. A combination of business optimisation and active risk management allows us to grow and improve the portfolio of assets.
- **Focusing on delivery:** In addition to having a quality portfolio of assets we also require an absolute focus on delivery. This is enabled by driving a high-performance culture, ensuring we have superior processes in place and employing and retaining the right people in the right jobs.

The successful execution of our strategy results in revenue creation, and from this we are able to deliver value to a number of stakeholders

and invest in host communities and countries. We pay interest to financial institutions, salaries to employees, payments to suppliers and taxes and royalties to governments.

Once these payments are made, the net cash remaining is used to reduce our debt, pay dividends to shareholders and invest in growth – three of our most critical strategic objectives.

This entire value generation and distribution process is underpinned by certain non-negotiable fundamentals. These include adherence to our safety ethos of 'if we cannot mine safely, we will not mine'; securing and maintaining our social licence to operate; meeting our environmental responsibilities; and, ensuring we have the necessary licences in place to meet all regulatory compliances. The Gold Fields values, which inform the way in which we work, also underpin all aspects of our business.

**For a graphic illustration of our business model, refer to the pages that follow**

## 1.4 Our value creation model (continued)

### Factors influencing our strategy

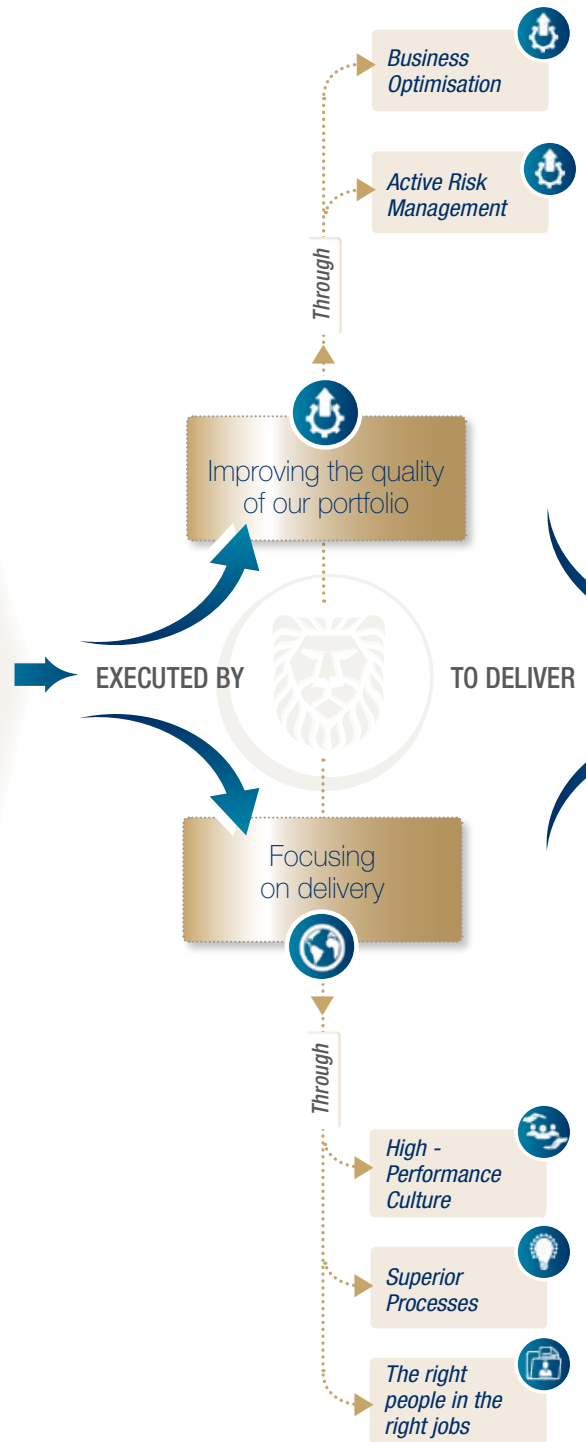
#### External

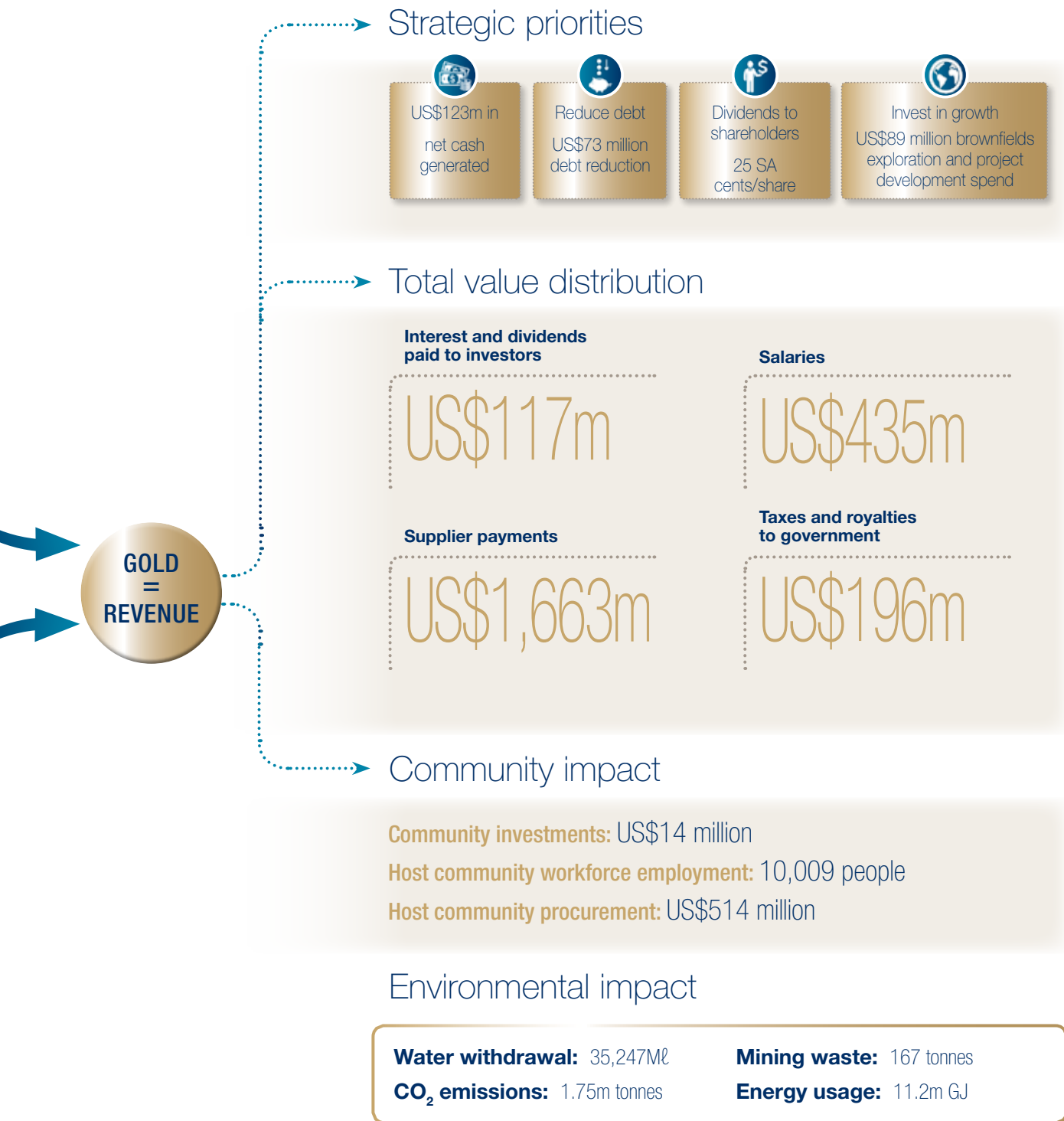
- Socio-economic and political environment
- Exchange rates
- Geographical environment
- Gold and copper price
- Macro-economic trends
- Host governments
- Host communities
- Mining, water and other licences



#### Internal

- Asset base
- Our people
- Our suppliers
- Our vision
- Our balance sheet
- Our shareholders





Underpinned by:  
Fundamental Non-negotiables

- Environmental responsibilities
- Innovation
- Zero harm
- Regulatory compliances
- Respect
- Delivery
- Responsibility

# 1.5 Gold Fields annual performance dashboard



1

## Financial

Category	2015		2014	2013
Gold price received (US\$/oz)	1,140	■	1,249	1,386
Revenue (US\$m)	2,545	■	2,869	2,906
Operating profit (US\$m)	1,089	■	1,191	1,239
Headline earnings/(loss) (US\$m)	(28)	■	27	(81)
Normalised earnings (US\$m)	45	■	85	58
Capital expenditure (US\$m)	634	■	609	739
Net cash flow (US\$m) <sup>1</sup>	123	■	235	(235)
Free cash flow margin (%)	8	■	13	N/A
Dividend (SA cents/share)	25	■	40	22
Total net debt (US\$m)	1,380	■	1,453	1,735
Debt/EBITDA <sup>2</sup> ratio	1.38	■	1.30	1.50

■ 2015 Performance drop against 2014 ■ 2015 Performance on par with 2014 ■ 2015 Performance improvement on 2014 or achievement in line with strategy



2

## Business optimisation

Category	2015		2014	2013
TRIFR (rate per million)	3.40	■	4.04	4.14
Fatalities	4 <sup>3</sup>	■	3	2
Gold produced – attributable (Moz)	2.16	■	2.22	2.02
All-in Sustaining Cost (US\$/oz)	1,007	■	1,053	1,202
All-in Cost (US\$/oz)	1,026	■	1,087	1,312
Attributable Gold Mineral Resources (Moz)	102.210	■	108.843	113.398
Attributable Gold Mineral Reserves (Moz)	46.064	■	48.123	48.608
Attributable Copper Mineral Resources (Mlb)	910	■	1,001	1,119
Attributable Copper Mineral Reserves (Mlb)	532	■	620	708
Brownfields exploration (US\$m)	72	■	58	32
Brownfields exploration – metres drilled	651,189	■	349,511	250,138

■ 2015 Performance drop against 2014 ■ 2015 Performance on par with 2014 ■ 2015 Performance improvement 2014 or achievement in line with strategy

<sup>1</sup> Net cash flow from operating activities after taking account of net capital expenditure and environmental payments

<sup>2</sup> EBITDA – Earnings before interest, taxation, depreciation and amortisation

<sup>3</sup> Three of the four fatalities were workplace accidents, while the fourth fatality was a member of the protection services team at South Deep who was shot and killed during a robbery at the mine



3

## People

Category	2015		2014	2013
Total employees	9,052	■	8,954	10,167
Contractors	7,798	■	6,486	6,685
HDSA employees in SA (%) <sup>1</sup>	71	■	71	70
Female employees (%)	14	■	14	11
Employee wages and benefits (US\$m)	435	■	468	595
Ratio of basic salary men to women	1.09	■	1.10	1.20
Employee turnover (%)	8	■	20	10

■ 2015 Performance drop against 2014 ■ 2015 Performance on par with 2014 ■ 2015 Performance improvement on 2014 or achievement in line with strategy



4

## Licence/Social licence to operate

Category	2015		2014	2013
Total value distribution (US\$m)	2,425	■	2,650	2,980
SED spending (US\$m)	13.7	■	17.4 <sup>2</sup>	17.2 <sup>2</sup>
Workforce from host communities (%)	59	■	57	–
In-country procurement (US\$bn)	1.27	■	1.44	1.44
Host community procurement (US\$m)	514	■	600	430
Environmental incidents (Level 3 and above)	5	■	4	3
Water withdrawal (Mℓ)	35,247	■	30,207	30,302
Water recycled/reused (Mℓ)	43,120	■	42,409	33,453
Electricity (MWh)	1,322,353	■	1,338,075	1,382,106
Diesel (TJ)	6,930	■	6,066	5,509
CO <sub>2</sub> emissions ('000 tonnes) <sup>3</sup>	1,753	■	1,694	1,731
Mining waste ('000 tonnes)	167,357	■	138,522	190,007
Closure costs provisions (US\$m)	353	■	391	355

■ 2015 Performance drop against 2014 ■ 2015 Performance on par with 2014 ■ 2015 Performance improvement on 2014 or achievement in line with strategy

<sup>1</sup> In terms of the Employment Equity definition, which includes white women as HDSA's (Historically Disadvantaged South Africans)

<sup>2</sup> Restated to include spending from the South Deep Community and Education Trusts

<sup>3</sup> Scope 1, 2, 3 emissions

# 1.6 Total value distribution

Gold Fields generates significant value for all the societies in which it operates – some of which can be quantified and some of which cannot. The most important means by which Gold Fields generates quantifiable value is outlined below:

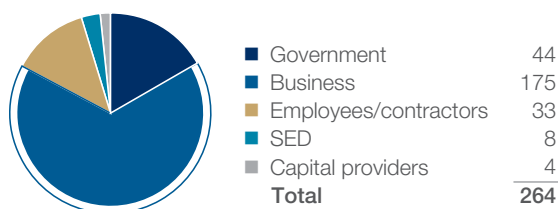
National value distribution by region and type 2015 (US\$m)	Government	Business	Employees/contractors	SED	Capital providers	National value distribution
Americas	44	175	33	8	4	264
Australia	75	676	137	1	0	889
South Africa	1 <sup>1</sup>	175	129	4 <sup>2</sup>	5	314
West Africa	71	628	112	2	14	827
Corporate	5	9	24	–	94	131
<b>Total Gold Fields</b>	<b>196</b>	<b>1,663<sup>1</sup></b>	<b>435</b>	<b>14</b>	<b>117</b>	<b>2,425</b>

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

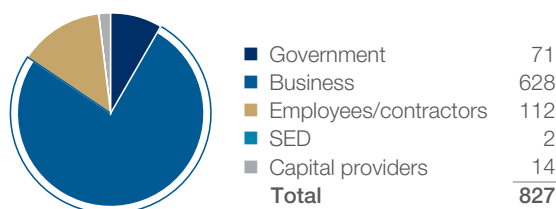
<sup>2</sup> This includes spending from the South Deep Community and Education Trusts

## National value distribution in our four regions

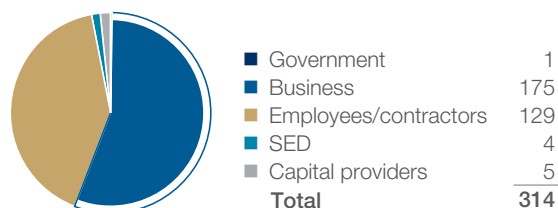
### Americas 2015 (US\$m)



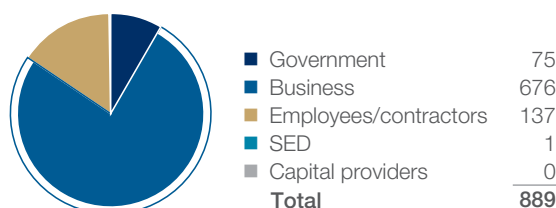
### West Africa 2015 (US\$m)



### South Africa 2015 (US\$m)



### Australia 2015 (US\$m)



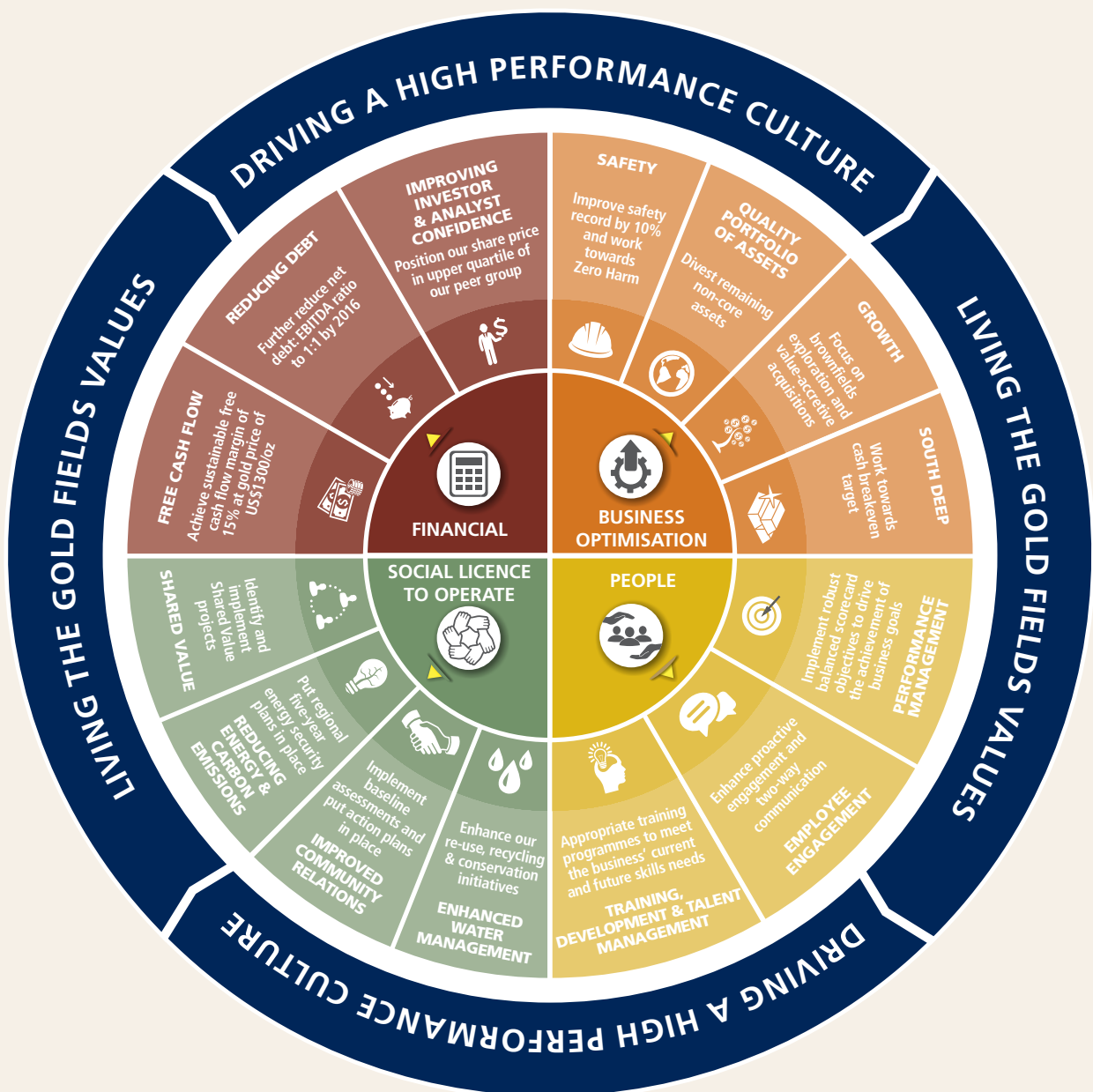
## Stakeholder value distribution

<b>Government</b>  <b>Payments include</b>	<b>Business</b>  <b>Payments include</b>	<b>Employees/ contractors</b>  <b>Payments include</b>	<b>Socio-economic development</b>  <b>Payments include</b>	<b>Capital providers</b>  <b>Payments include</b>
<p>Mining royalties and land-use payments, Income taxes, Taxes, duties and levies related to the procurement of goods and services. Dividends</p>	<p>Payments to business, including both operational and capital procurements</p>	<p>Payments to employees and contractors, such as wages, benefits and bonus payments (including shares and payroll taxes)</p>	<p>SED spending, including on infrastructure, health and wellbeing, education and training, local environmental initiatives and donations</p>	<p>Payments to the providers of capital, including interest and dividend payments to shareholders</p>
				
<p><b>Why these stakeholders matter and what we contributed in 2015</b></p>	<p><b>Why these stakeholders matter and what we contributed in 2015</b></p>	<p><b>Why these stakeholders matter and what we contributed in 2015</b></p>	<p><b>Why these stakeholders matter and what we contributed in 2015</b></p>	<p><b>Why these stakeholders matter and what we contributed in 2015</b></p>
<p>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:</p> <ul style="list-style-type: none"> <li>➤ In 2015, we paid governments US\$196 million (2014: US\$194 million) in taxes and royalties, 8% of total value distribution (2014: 7%)</li> <li>➤ In addition, the Ghanaian government received US\$11 million in dividends relating to its 10% shareholding in Gold Fields Ghana</li> </ul>	<p>Our supply chain businesses provide the equipment and services needed to develop and maintain our operations:</p> <ul style="list-style-type: none"> <li>➤ In 2015, we paid US\$1,663 million to suppliers and contractors, representing 69% of total value creation (2014: US\$1,835 million/69%)</li> <li>➤ Of the total 2015 procurement expenditure, US\$1,268 million, or 76%, was spent on businesses based in operating countries (2014: US\$1,410 million/76%)</li> <li>➤ Within this figure, US\$514 million, or 35%, of procurement was spent on suppliers and contractors from host communities (2014: US\$600 million/39%) (p110)</li> </ul>	<p>The technical skills, experience, and manpower of our people drive the day-to-day operations of our business, while their intellectual capital contributes to our strategy:</p> <ul style="list-style-type: none"> <li>➤ In 2015, Gold Fields paid US\$435 million (2014: US\$468 million) to employees in terms of salaries, dividends and benefits, representing 18% of total value distribution (2014: 18%)</li> <li>➤ Gold Fields continues to provide employees (where legislated) with additional benefits such as retirement savings, healthcare assistance, life and disability insurance, housing assistance and personal accident cover</li> </ul>	<p>Host communities are the source of a large portion of our workforce and provide us with our social licence to operate:</p> <ul style="list-style-type: none"> <li>➤ In 2015, we paid out US\$13.7 million (2014: US\$17.4 million) in terms of SED investment</li> <li>➤ Independently, the South Deep Trusts spent R24.3 million (US\$1.9 million) in 2015 (2014: R10.7 million (US\$1.0 million))</li> <li>➤ In 2015, 59% of our workforce were drawn from host communities (2014: 57%)</li> <li>➤ See page 110 for an analysis of our host community employment and procurement as well as other benefits and investment in communities</li> </ul>	<p>Financial institutions, shareholders and bond holders invest with us, thus enabling us to fund the development, maintenance and growth of our operations:</p> <ul style="list-style-type: none"> <li>➤ In 2015, Gold Fields paid US\$117 million (2014: US\$137 million) to the providers of debt and equity capital, mainly in the form of interest and dividends. This made up 5% of our total value distribution (2014: 5%)</li> <li>➤ Net debt was reduced by a further US\$73 million to US\$1,380 million during 2015</li> </ul>

# 1.7 Group performance scorecard 2015

The Group's performance for the year under review was measured against the focus areas shown in this 2015 Group performance scorecard.

Our performance against the objectives is reported in this IAR.





# 2

## Leadership, governance and materiality

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2.5	Risk and materiality	p42



## 2.1 Vision of the Chairperson



➤ Cheryl Carolus – Chairperson

Being a global company, we deal with a range of stakeholders across the multiple jurisdictions in which we operate and through these engagements we generally find solutions that are best for our business and our stakeholders

The past year has been another challenging period for the global gold industry. After peaking around US\$1,300/oz in January 2015, the US Dollar gold price steadily decreased through 2015, to end off the year around the US\$1,050/oz level. Fortunately, our actions in recent years placed us in a stronger position to withstand this further fall in the gold price. In addition, our globally diversified portfolio has allowed us to benefit from commodity currency depreciation against the US Dollar.

During 2015, we further reduced our All-in Cost (AIC) to US\$1,026/oz, placing Gold Fields in the bottom half of the industry cost curve. In 2012 AIC averaged US\$1,537/oz, which means we have cut costs by one-third in three years – a remarkable achievement. This allowed the Group to generate US\$123 million of net cash flow from operations, which has enabled us to deliver on our commitments of paying dividends and improving the balance sheet.

In 2015, we continued to optimise our strong international portfolio and focused on fixing the base at South Deep. We are pleased to have seen some early signs of improvement at South Deep during the second half of the year. Underpinning this was the strength of the international operations, which produced 1.96 million attributable ounces at an average AIC of below US\$950/oz. In Australia, our biggest region, we expect the current level of exploration expenditure to continue in order to sustain and potentially grow production. Our strategy towards growth, which is a preference for acquisitions of producing assets over greenfields exploration, remains intact and we continue to evaluate value-accretive opportunities.

While we believe in the long-term value of gold, we must continue our efforts on modernising all aspects of our business in order to survive volatile and ever-changing market conditions. We commend our CEO, Nick Holland, on his recent

presentation on *The Gold Mine of the Future*, and strongly believe that this changing mind-set bodes well for the long-term future of Gold Fields.

Being a global company, we deal with a range of stakeholders across the multiple jurisdictions in which we operate and through these engagements we generally find solutions that are best for our business and our stakeholders.

When it comes to the safety and wellbeing of Gold Fields' employees and contractors there is never a time to be complacent or rest on our laurels despite the undoubted progress that has been made. Tragically four fatalities occurred during the year – at our South Deep mine in South Africa and the Tarkwa mine in Ghana. Three of these were workplace accidents, the fourth was a member of our protection services who was shot and killed during a robbery at South Deep. My heartfelt condolences go out, once again, to the relatives, friends and colleagues of Kennedy Katongo, Albert

Chiungo, Sbongiseni Ngqoleka and Clement Aidoo.

In honour of their memory, and those who died at our mines before them, this Board will continue to press management on the achievement of Zero Harm at all our operations. Similarly, reducing the exposure of our employees to occupational and non-occupational diseases such as Silicosis, Tuberculosis, HIV/Aids, Noise Induced Hearing Loss and Malaria must remain a priority.

With regards to the high-profile Silicosis court case, in which Gold Fields is a co-respondent, it is worth noting that further significant progress has been made in underground dust management and related work at South Deep over the past few years. The past year has been spent with our peer companies in an intensive engagement process with all stakeholders to find a comprehensive solution to the occupational lung disease challenge that is both fair to past, present and future employees, and sustainable to the companies and the industry.

Stakeholder engagement, beyond the regular interaction with our shareholders and investors, is becoming an increasingly critical issue and the Board devotes a large amount of time to ensure that Gold Fields' management deals appropriately with the challenges, issues and concerns of the key stakeholders in our host governments, amongst our workforce and in our host communities. During 2015, Gold Fields' total value distribution to our stakeholders – as measured by World Gold Council (WGC) standards – was almost US\$2.43 billion in the form of payments to governments, capital providers, communities, business suppliers and employees.

Communities adjacent to the mines we operate grant us our social licence to operate and increasingly have to be consulted on mining operations on their doorsteps. Unfortunately, the

mining industry has not always been successful in addressing the rightful aspirations of these communities to see greater social and economic benefits from the mines.

This can no longer be the *modus operandi* of the industry. We need to intensify engagement with host communities, understand their aspirations and implement strategies and projects to successfully and collaboratively meet them without undermining the economic viability of our mines. Gold Fields has listened and is painfully aware of the wide trust gap that still exists between these communities and us. In response, we are implementing a range of initiatives, in addition to work already ongoing, ranging from strengthening the capacity of our community relations teams to upskilling small businesses in our host communities for them to be able to supply goods and services to our mines.

In addition, we have supported the ability of the South Deep Trusts as well as Foundations in Peru, Ghana and Australia to distribute funds more effectively to host community projects. Gold Fields is making significant strides in putting community contribution on a more sustainable footing – but undoubtedly there is always more that needs to be done.

Globally, our operations are confronted by a range of external regulatory, political, labour and price dynamics that will impact on their future business performances. None more so than those initiated by governments, which through their policies, regulations and taxes, have the ability to create the environment necessary for businesses to prosper.

The industry around the world is also facing high electricity tariffs, which are exacerbated by regular power outages, as well as water shortages. This is most acute at our Ghanaian and South African mines and we have implemented measures to

improve energy efficiencies and supply at these operations, as well as securing ongoing water supplies.

As a committed corporate citizen, Gold Fields is more than willing to play its role in addressing these challenges and find solutions that benefit all stakeholders. We can only do so if our stakeholders engage with us in open dialogue and genuine partnerships and if additional regulatory, fiscal and cost imposts, which will be difficult to absorb by the embattled mining industry, are avoided. In fact, in some cases fiscal relief is required to sustain our industry for the benefit of all stakeholders.

As directors of this Company one of our key responsibilities is to ensure that the corporate governance systems at Gold Fields are in line with the ever-changing and more stringent rules and regulations that are being rolled out by regulators across the globe. The Gold Fields Board is committed to high levels of corporate governance and statutory compliance and will review policies and procedures when required.

In conclusion, I would like to welcome Steven Reid to the Board. He joined in February 2016 and brings with him 35 years of experience in the mining industry. I would also like to express my gratitude to my fellow directors and executive management, led by our CEO, Nick Holland. Most importantly, I want to thank every employee at Gold Fields for their hard work and dedication to the Company. They are integral to its success and it is thanks to their efforts that Gold Fields is now in a position to withstand the low gold price environment and flourish when the gold price does start to recover.



**Cheryl Carolus**  
Chairperson

## 2.2 CEO Report



➤ Nick Holland – Chief Executive Officer

Despite the 45% decline in the price of gold between 2011 and 2015, Gold Fields is today in much better shape generating substantially more cash than when the gold price was at its peak

### Dear Shareholders

The global gold mining industry has operated under the shadow of a falling gold price since September 2011, when it was trading at a record high of about US\$1,900/oz.

Since then gold has lost about 45% of its value and traded at an intraday low of US\$1,045/oz on 3 December 2015. Subsequently, the gold price has recovered to levels of around US\$1,200/oz. Weaker currencies in commodity-exporting nations provide a cushion to the cash flows of companies operating in these countries. The weaker Australian Dollar and South African Rand have improved the current prospects of Gold Fields despite lower US Dollar gold prices, with up to two-thirds of our production benefiting from the softer exchange rates.

When Gold Fields started on its strategic transformation journey in the final quarter of 2012, the gold price was still trading between US\$1,700/oz and US\$1,800/oz. The core objective of the transformation process was to address investor

perception that gold mining companies, including Gold Fields, were not providing investors with the expected leverage to the then prevailing high gold price. This was to be achieved by turning Gold Fields into a lean, focused and globally diversified gold mining company that generates substantial free cash flow. In turn, this would enable Gold Fields to meet the legitimate expectations of all of its stakeholders, in particular, to provide its shareholders with superior leverage to the price of gold.

Little did we know at the time that the industry was facing its first year in the multi-year decline in the price of gold. What we can say with certainty is that it has proven fortuitous that we embarked on our transformation journey when we did. Not only was our pre-emptive restructuring the right thing to do to start rekindling investor interest and confidence in Gold Fields and the gold mining sector generally, but it provided Gold Fields with a built-in safety cushion which has enabled us to withstand the lower gold prices experienced since then.

The success of our restructuring journey is reflected in our operational and financial performance during 2015, the highlights of which are described below. It also reflects in the progress that we have made with our key strategic priorities for 2015, which were:

- Setting up South Deep for long-term success
- Cash flow and margin – making money at current lower gold prices
- Dividends – paying between 25% and 35% of normalised earnings
- Balance sheet – further reducing our net debt to EBITDA ratio
- Growth through brownfields exploration and opportunistic, value-accretive acquisitions

It is fair to say that, despite the 45% decline in the price of gold between 2011 and 2015, Gold Fields is today in much better shape generating substantially more cash than when the gold price was at its peak. While this is reassuring in the current low price environment, it also positions Gold Fields for enhanced cash generation when the gold price eventually starts to appreciate again, which it undoubtedly will.

The ability to generate cash is critical in distributing the benefits from mining that our stakeholders rightfully expect. These include:

- ▶ Shareholders and debt providers, who are seeking a return on their invested capital through interest and dividend payments
- ▶ Our employees, whose work is rewarded through salaries and other benefits
- ▶ Contractors and suppliers, from whom we procure goods and services
- ▶ The governments and regulators, who grant us our mining licences and who benefit from our taxes and royalties
- ▶ Communities, whose support is critical for our social licence to operate and who benefit through jobs and procurement as well as our social investment programmes

### Performance highlights 2015 vs 2014

	2015	2014
TRIFR	<b>3.40/million hours worked</b>	4.04/million hours worked
Attributable production	<b>2.16Moz</b>	2.22Moz
All-in Sustaining Costs (AISC)	<b>US\$1,007/oz</b>	US\$1,053/oz
All-in Costs (AIC)	<b>US\$1,026/oz</b>	US\$1,087/oz
Net cash flow <sup>1</sup>	<b>US\$123 million</b>	US\$235 million
Free cash flow (FCF) margin	<b>8%</b>	13%
Net debt	<b>US\$1,380 million</b>	US\$1,453 million
Net debt: EBITDA	<b>1.38</b>	1.30
Dividends	<b>R0.25 per share</b>	R0.40 per share
Total value distribution	<b>US\$2,425 million</b>	US\$2,650 million
Energy spend	<b>US\$312 million</b>	US\$367 million
Water withdrawal	<b>35,247 Mℓ</b>	30,207 Mℓ
Total CO <sub>2</sub> emissions (Scope 1, 2 and 3)	<b>1,753,163 tonnes</b>	1,694,043 tonnes

<sup>1</sup> Net cash flow from operating activities after taking account of net capital expenditure and environmental payments

- ▶ The Group's Total Recordable Injury Frequency Rate (TRIFR) improved by almost 16% to 3.4 recordable injuries per million hours worked, though this strong safety performance was overshadowed by the four fatalities reported in 2015
- ▶ Gold Fields recorded a strong operational performance in 2015 with attributable production of 2.16 million gold equivalent ounces, broadly in line with guidance for the full year of 2.17 million ounces and 3% below the 2.22 million ounces reported in 2014
- ▶ Strong cost management across the Group resulted in an outstanding cost performance with AIC of US\$1,026/oz being 5% below guidance for the year of US\$1,075/oz and 6% below the AIC of US\$1,087/oz reported in 2014. If South Deep, which is still in ramp-up, is stripped out then the Group's AIC for the year would have been US\$944/oz (2014: US\$1,020/oz), which demonstrates the robustness of the rest of the portfolio
- ▶ Despite a 9% decline in the average gold price received from US\$1,249/oz in 2014 to US\$1,140/oz in 2015, net cash flow from operating activities – after taking account of net capital expenditure and environmental payments – amounted to US\$123 million in 2015 compared with US\$235 million in 2014
- ▶ The Group's free cash flow margin for 2015 was 8% despite the fact that, at US\$1,140/oz the actual annualised gold price received was 12% below the long-term planning price of US\$1,300/oz. If the price received for the year was normalised to US\$1,300/oz, then the free cash flow margin would have been 15% – in line with our stated target
- ▶ Normalised earnings for 2015 totalled US\$45 million compared with US\$85 million in 2014
- ▶ As a result of the strong cash generation during the year, net debt was reduced by a further US\$73 million to US\$1,380 million (31 December 2014: US\$1,453 million), stabilising the Group's net debt to EBITDA ratio from 1.30 at the end of 2014 to 1.38 at the end of 2015
- ▶ A final dividend of R0.21 per share was declared. Together with the interim dividend of R0.04 per share for the six months ended 30 June 2015 this brings the total dividend for the year to R0.25 per share. At 34% of normalised earnings, this is in line with the Group's policy to pay out between 25% – 35% of normalised earnings as dividends
- ▶ Gold Fields generated over US\$2.43 billion in value measured in terms of spending on business suppliers and contractors, economic development spending, wages and salaries, taxes and royalties as well as interest and dividend payments to capital providers. This was slightly below the total value creation of US\$2.65 billion in 2014, as we reduced our capital and operational expenditures
- ▶ While energy consumption and water withdrawal increased by 7% and 17% respectively in 2015 – with a concomitant rise in carbon emissions – we also achieved energy savings of around US\$30 million amid greater operational energy efficiencies. Water reuse and recycling improved by 1.7%

## 2.2 CEO report (continued)

### Group performance scorecard

In 2015, Gold Fields adopted a Group performance scorecard that incorporated the strategic priorities listed above and seeks to instil the right culture and behaviours amongst our workforce, driven by the strategic imperative of cash generation by the business.

By integrating all of the key value drivers into the business, the scorecard also aims to enhance the Group's sustainability. The scorecard consists of four key performance areas and elements against which we measure our performance. The four key performance areas are: financial performance; business optimisation; people; and, our social licence to operate. A brief overview of each area, broken down by the respective elements follows.

#### a) Financial performance

The first key performance area in the Group scorecard is financial performance, as measured by cash flow generation and debt reduction as well as improving investor confidence.

The impetus to improve the financial performance of the Group lies in the strategic shift introduced in 2012, of replacing the then industry-wide prevailing production growth philosophy, of ounces for the sake of ounces, with a rigorous new focus on growing the margin and improving free cash flow per ounce.

This fundamental shift in strategy is embodied in our overarching strategic objective of generating a 15% FCF margin at a gold price of US\$1,300/oz, which has become the core commercial driver and guiding principle underpinning everything we do – from exploration to production.

Why US\$1,300/oz? Because we believe this is a sensible long-term price for bullion. The premise is that when the gold price trades above US\$1,300/oz, the free cash flow margin will grow commensurately. Conversely, when prices trade below US\$1,300/oz, as we have seen since 2012, the inclusion of the 15% free cash flow margin at a gold price of US\$1,300/oz provides Gold Fields with a safety cushion down to our cash break-even level of approximately US\$1,050/oz. The bottom-line is that the Group is focused on cash generation at all levels of the price cycle and this drives our strategies, activities and culture.

The Group's free cash flow margin for 2015 was 8% despite the fact that, at US\$1,140/oz, the actual gold price received was 12% below the long-term planning price of US\$1,300/oz.

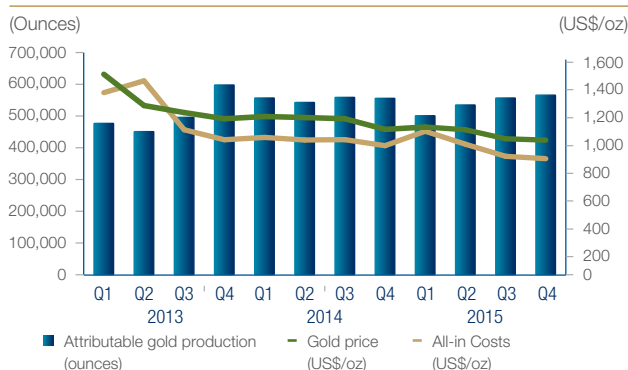
#### Net cash flow

Gold Fields today is in much better shape than it was in 2012, when measured by net cash flow (cash flow from operating activities after taking

account of net capital expenditure and environmental payments). Despite the 31% decline in the average annual price of gold between 2012 and 2015, Gold Fields' ability to generate cash has improved substantially. During 2015 this was also aided by the weakening of the South African Rand and the Australian Dollar against the US Dollar.

- ▶ In 2012 Gold Fields (then including Sibanye Gold) had negative net cash flow of US\$280 million despite an all-time high average gold price for the year of US\$1,656/oz
- ▶ In 2013, the first full year of the transformation process, Gold Fields reduced its negative net cash flow to US\$235 million despite a 16% decline in the average gold price to US\$1,386/oz during the year and incurring restructuring costs
- ▶ In 2014, Gold Fields generated US\$235 million of net cash, a positive swing of US\$470 million, despite the average gold price received once again falling by 10% to US\$1,249/oz for the year. The Group's free cash flow margin improved to a positive margin of 13%
- ▶ In 2015, Gold Fields generated US\$123 million of net cash despite the average gold price received again declining – by 9% – to US\$1,140/oz. The free cash flow margin was 8% for the year

### Cost reductions amid lower gold price and stable production



### Strong focus on cash generation (net cash flow<sup>1</sup>)



<sup>1</sup> Net cash flow from operating activities after taking account of net capital expenditure and environmental payments

### Focus on cost

Central to our ability to generate free cash flow is a commitment to aggressive cost management. This continued to be reflected in the 6% reduction in AIC during 2015, which brings the cumulative reduction in our AIC since 2012 to 33% in nominal terms.

During 2015, we were also able to beat our cost guidance. Our original guidance for AISC and AIC for 2015 was US\$1,055/oz and US\$1,075/oz respectively, while our actual costs for the year were US\$1,007/oz and US\$1,026/oz respectively, an improvement of 5% each on guidance.

While the bulk of the cost reduction initiatives were implemented during 2013 and 2014, as described in our 2014 Integrated Annual Report (IAR), we continue to revisit every aspect of our operations to ensure the sustainability of previously captured cost reductions, and to ensure that new opportunities for cost reductions are achieved. Amid the continued decline in the gold price in 2015 our focus shifted to reducing cash costs and trimming non-essential capital and we were careful not to cut our sustaining and growth capital expenditure critical to maintaining the long-term integrity of our ore bodies. Over the past three years our total annual capital expenditure was US\$739 million in 2013, US\$609 million in 2014 and US\$634 million in 2015.

It is worth recalling the core elements of our cost reduction programme implemented between 2013 and 2015. They included the following:

- ▶ Trimming costs through elimination of inefficiencies and productivity improvements
- ▶ The elimination of marginal mining at all of our operations
- ▶ The restructuring of all of our corporate, regional and operational structures
- ▶ The stabilisation of our workforce at 9,052 employees and 7,798 contractors

- ▶ The ongoing rationalisation and prioritisation of capital expenditure and, where appropriate, the deferral of capital investment without negatively impacting the short, medium and long-term sustainability of our mines
- ▶ The cancellation of near-mine and greenfields growth projects that demonstrated inadequate returns
- ▶ The closure of the Group's greenfields exploration and project development division and, where appropriate, the sale of projects in the project pipeline

A key driver in reducing the Group's AISC and AIC is the South Deep mine in South Africa, which is still in build-up and not yet at steady-state levels of production. If South Deep is excluded from the Group's AISC and AIC for 2015, then the AISC and AIC would have been US\$930/oz and US\$944/oz respectively, placing Gold Fields among the lowest-cost gold producers worldwide. The objective is for South Deep to reach cash break-even by the end of 2016.

### Debt reduction

Gold Fields has long maintained the position that its debt comfort zone is approximately 1.0 times net debt to EBITDA (Earnings before interest, taxes, royalties, depreciation and amortisation). Following the unbundling of Sibanye Gold and the acquisition of the Yilgarn South assets in 2013, this ratio increased to approximately 1.5 times at the end of 2013. During 2015, net debt was reduced by US\$73 million to US\$1,380 million by the end of the year on the back of lowering the debt by US\$282 million during 2014. The net debt to EBITDA ratio at end-2015 was 1.38 compared with 1.30 at the end of 2014. Although debt was again reduced in 2015, the lower gold price more than offset these gains on the net debt to EBITDA ratio.

In March 2016, Gold Fields successfully completed a R2.3 billion (US\$150 million) equity raising by way of a private placement of an additional 5% of its shares to institutional investors. The equity

raising was significantly oversubscribed and the proceeds were used to fund the February 2016 buy-back of US\$148 million of the US\$1 billion 2020 bond.

The effect of these transactions will be a reduction in the net debt to EBITDA ratio from 1.38x as at 31 December 2015 to 1.21x, which gets Gold Fields closer to achieving one of its key strategic objectives of a net debt to EBITDA ratio of 1.0x (p57). The repayment of debt, together with dividend payments, will remain the top financial priority for the Company.

### Improving investor confidence

In Gold Fields' 2014 IAR, the Group published its Investor Charter for the first time. The Charter embodies three core commitments aimed at regaining and growing investor confidence in Gold Fields:

- ▶ To build a quality portfolio of productive mines
- ▶ To provide superior returns
- ▶ To deliver on our promises

Gold Fields' portfolio has undergone a fundamental change since 2013. We spun off the Sibanye Gold assets to shareholders, eliminated marginal mining as a practice at all of our assets, stopped all projects in our growth pipeline that did not provide an adequate return and, in October 2013, acquired the Yilgarn South assets in Western Australia from Barrick Gold. The latter deal has proved a model for the kind of value-accretive acquisition we are seeking in future, as we managed to pay off the US\$262 million consideration for the three mines in Q3 2015, two years after the acquisition.

The portfolio of operating assets is consistently reviewed in line with our portfolio management strategy (p76). During 2016, we expect to decide the long-term future of our Damang mine in Ghana and Darlot mine in Australia.

As mentioned before, we have reduced the AIC by 33% over that period while turning around the cash flow position of the Group with net cash generated of US\$235 million in

## 2.2 CEO report (continued)

2014 and US\$123 million in 2015, despite significant declines in the gold price received.

Gold Fields has also made significant progress in its ability to deliver on its guidance and has, since 2013, consistently met or exceeded its Group production and cost guidance.

One operating asset in the Gold Fields Group that still has to be brought to account fully is the South Deep mine in South Africa. Here we are targeting cash breakeven by the end of 2016 with long-term production metrics to be published early in 2017.

During 2015, we made considerable progress in 'getting the basics right' at South Deep with improvements in the three key performance areas that we are focusing on: people, fleet and mining methodologies. As a result, the production and cash burn position of the project have improved markedly through the second half of 2015.

We certainly believe that we have put the building blocks in place to restore the confidence of our large shareholder base and attract the long-term investors that seek value and long-term leverage to the gold price.

### b) Business optimisation

Underpinning the financial performance of the business is Gold Fields' commitment to running its operations safely, efficiently and cost-effectively without undermining the long-term sustainability of our mines. We measure the success of business optimisation by looking at our progress on safety and wellness; the performance of our portfolio of assets; the implementation of our growth strategy and setting up the South Deep mine for long-term success.

#### *Safety and wellness*

Safety is management's first priority in running our operations, and it is critical that we continuously emphasise that our first value is 'if we cannot mine

safely we will not mine'. Nevertheless, we reported three mining-related fatalities and one fatal shooting during 2015 and my condolences once again go out to the families, friends and colleagues of the deceased.

Three fatalities occurred at the South Deep mine in South Africa and one at the Tarkwa mine in Ghana:

- ▶ In March, Kennedy Katongo, a boilermaker, was injured at a station tip. He succumbed to his injuries in hospital three days later
- ▶ Alberto Chiungo, a contracted locomotive operator, was fatally wounded in May, when he was caught between the loco and a hopper during tramming operations
- ▶ In August, S bongiseni Ngqoleka, a security contractor, was shot and killed by armed robbers targeting copper cables at South Deep. Two other security personnel were injured in the same attack
- ▶ In December, a spotter at Tarkwa, Clement Aidoo, was struck and fatally injured by a truck when it reversed after dumping its load of material

South Deep's two fatal mine accidents and another serious accident at the mine led to Section 54 orders being issued by the Department of Mineral Resources, placing a moratorium on mine-related activities across the mine and effectively stopping production for a total of about 18 days. We fully support these orders and during the year also conducted a comprehensive mine-wide review of all safety protocols, procedures and standards at South Deep in line with the mandate to improve the mechanised mining culture at the project. Many of the recommendations arising from the review have already been implemented and are having a visible impact on our safety performance. The fatal accident at Tarkwa, the first at our Ghanaian operations in almost four years, has also led to a review of truck loading and driving procedures.

The fatalities were an undoubted setback on our path to Zero Harm. However, our TRIFR continued to improve during 2015 – by almost 16% to 3.4 recordable incidents per million hours worked – demonstrating that the numerous regional safety programmes being implemented are yielding positive results.

The Group has also intensified operation-specific health and wellness programmes, focusing on improving the physical and mental health of our employees. These are having a significant impact as the 53% decline in Noise Induced Hearing Loss submissions and the 40% reduction in the number of Silicosis cases submitted last year illustrates.

#### *Quality portfolio of assets*

In 2015, Gold Fields consolidated its position as a focused, leaner business by pro-actively managing its portfolio of operating and growth assets. This active portfolio management approach requires an ongoing strategic review of all existing assets as well as potential acquisition targets against our strategic imperatives. The aim is to improve the quality of our overall portfolio measured by the improvement in cash generation and sustainability of operations. It implies that we are prepared to trade existing assets for better, new assets.

The most obvious manifestation of this was the 2013 unbundling of the Group's conventional, deep-level underground mines in South Africa to create Sibanye Gold and the subsequent acquisition of Barrick Gold's Yilgarn South assets in Western Australia. Gold Fields' portfolio is now characterised by modern, fully mechanised open-pit and underground mining, with diversified production spread across three continents.

In this context, Gold Fields continued to focus on improving the cash-generation performance of its



existing operations. During 2015, this included:

- ▶ Protecting the commercial sustainability of its mines by avoiding high-grading and stripping and investing in ore development on an ongoing basis
- ▶ Brownfields exploration for life-of-mine extensions
- ▶ Production and strategic planning based on the delivery of a 15% free cash flow margin at a gold price of US\$1,300/oz

To ensure that our business has a strong future, we have made continued exploration and development of our mines' underground and surface ore bodies a strategic priority. These are among the last activities we would cut, even in a sustained low gold price environment and costs associated with maintaining the integrity of our ore bodies is built into the mines' cash-flow models. Should gold prices go down to levels of around US\$1,000/oz or lower for a sustained period of time, we would need to look at a new operating and planning protocol at these lower prices to protect the integrity of our ore bodies.

### Growth

Growth at Gold Fields is not just a matter of increasing the Group's Mineral Resources and Mineral Reserves or boosting the production profile. It is about growing cash flow per ounce and per share in the medium and long term. Since 2013, this has resulted in:

- ▶ The cessation of all early greenfields exploration activity
- ▶ Refocusing from greenfields exploration to lower risk, near-mine exploration to improve the quality of ore feed and provide longevity to our operations
- ▶ Disposing of growth projects that are marginal, located in higher-risk locations and/or are primarily focused on metals other than gold
- ▶ Focusing on portfolio-enhancing, value-accretive acquisitions

Gold Fields believes that at the current point in the price cycle near-mine exploration offers the best route to low-cost ounce replacement that can generate cash in the short and medium term at our Australian operations, which have a history of reserve replacement. In 2015, Gold Fields raised its total near-mine exploration expenditure by 20% to US\$72 million, on top of the US\$60 million and US\$32 million spent in 2014 and 2013 respectively, in pursuit of this strategy. Much of this activity was focused on the Australia region, where the mines in the Gold Fields portfolio spent A\$91 million (US\$69 million) in 2015. This builds on the A\$64 million (US\$58 million) spent in 2014 and A\$34 million (US\$32 million) in 2013. To build on the work undertaken in 2015 we have budgeted A\$86 million (US\$63 million) for 2016.

This is part of a multi-year strategy to both replace and increase reserves and resources at the operations in Australia. In addition to exploration drilling to extend current ore bodies, activity was also focused on developing early-stage generative targets on the prospective leases. Some successes can be recorded:

- ▶ St Ives' Invincible mine has already produced over 131,000 ounces
- ▶ Work at Agnew has shown good potential at the Cinderella and FBH ore bodies
- ▶ Exploration at Granny Smith has indicated further mineralisation at depth at the existing Wallaby underground mine
- ▶ Multiple targets have been identified across the lease at Darlot but more work needs to be done to scope these ore bodies

At our Damang mine in Ghana, work is continuing to evaluate the long-term growth potential of the mine. The mine has a good ore body at depth under the original pit that will require a push-back to expose. We expect to announce a decision by mid-2016.

In 2015 we continued the disposal of projects that are not aligned with our Group objectives: the Woodjam project in Canada was sold, while the Arctic Platinum project in Finland remains earmarked for sale.

We continue to drill our Salares Norte project in northern Chile to assess its longer-term potential.

The Far Southeast project in the Philippines has also been retained in our portfolio and we maintain optionality on this project.

Gold Fields is also open to the possibility of further value-accretive transactions similar to our acquisition of the Yilgarn South assets in 2013.

### South Deep

After a difficult 2014 and the introduction of a new management team, we took the decision at the start of 2015 to take a step back and 'get the basics right' at South Deep to ensure a stronger foundation for sustainable growth in the future. The first six months of the year came with its own challenges as the new management team adopted a strategy of embedding an improved safety and productivity culture as it set the mine up for the long-term.

However, the second half of the year showed some early encouraging indicators of improvement. Production in the second half was 64% higher at 123,000 ounces than in the first half, with total production for the year coming in at 198,000 ounces (2014: 200,500 ounces). In Q4, aided in part by the rising Rand gold price, the cash outflow from the project was limited to R57 million down from R266 million in Q3.

## 2.2 CEO report (continued)

We remain committed to our target of achieving a breakeven cash position by the end of 2016. Further, Gold Fields will provide an updated production ramp-up schedule early in 2017, once our ‘back to basics’ programme has had more time to be bedded down.

The three main focus areas at South Deep have been:

**People:** To augment the current skills base, South Deep recruited an additional 164 skilled employees during 2015, mostly from the platinum sector, which has a similar mechanised mining skills set. The recruitment of identified critical skills was 98% completed by the end of 2015. Importantly, most of the core mining and engineering positions have now been filled. This has been supported by intensified training programmes for our existing staff, backed by the signing of a three-year wage deal with trade unions in March 2015. This will govern wages and other working conditions until March 2018 and should give South Deep a degree of labour stability as the mine builds up.

**Fleet:** During 2015, the South Deep machinery and vehicle fleet were optimised and a total of 24 Category 1 machines were delivered to the mine during the year, with all machines, except one, commissioned before year-end. An additional 24 machines will be acquired during 2016. These fleet acquisitions will mean that South Deep would have replaced more than half of its fleet by the end of 2016, which should have a positive impact on availability and utilisation. The maintenance capacity at South Deep improved during the year through the implementation of supplier maintenance contracts in corridor 2 (approximately 35% of total mining), as well as the commissioning of the 93 level workshop.

**Mining method:** During 2014 and 2015, South Deep management, in collaboration with a team of leading international and local geotechnical

experts, reviewed the de-stress mining method. A strategic mine design change in the de-stress methodology and a conversion from low profile (2.5 metres vertical height) to high profile (5.0 metres vertical height) de-stress mining commenced in the September quarter. By year-end about 70% of the mine was employing this approach, which, even at this early stage, has already contributed to simplifying and derisking the mining process. The transition to high profile de-stress is expected to continue until the early part of 2018.

### c) People

The profile of our workforce was profoundly impacted during the initial years of our transformation journey (2012 – 2014) with large-scale reductions in the number of employees and contractors. However, since then, our human resource base has stabilised with 9,052 employees and 7,798 contractors on our books at the end of 2015.

With the shift towards mechanisation and automation, we have found that in addition to the continued development and training of our workforce, it is also important to recruit the appropriate skills at our mines. At South Deep in 2015 we employed an additional 164 mechanised mining skills. However, our strategy remains to grow our own people through focused internal training efforts. During 2015, we spent over US\$12.4 million globally on training and development – on top of recruiting the best mining skills to supplement the existing talent pool.

Since the restructuring, our smaller, yet more skilled, workforce has ensured that Gold Fields works more efficiently to improve productivities. The key to this is that employees are incentivised to deliver against clearly defined performance targets that directly support the achievement of business objectives.

Our remuneration strategy is evolving to attract and retain these skills, and our people development approach is

being adjusted to ensure we build a robust internal skills pipeline that can supply the skills that the business needs, now and in the future. Furthermore, we continue to entrench a high-performance culture that encourages people to meet and exceed their performance targets. Finally, employees need a work environment that supports optimal functioning and ensures they are safe, healthy, balanced and productive.

The People strategy is reflected in our Group scorecard objectives for 2015:

- Training, development and talent management
- Employee engagement
- Performance management

A large portion of our workforce in Ghana and South Africa is represented by a number of trade unions. We successfully engaged with these trade unions during 2015 and concluded wage deals in both countries. In South Africa we opted out of the centralised wage negotiations and moved to company-level negotiations to reflect the different skills set at South Deep. In April, we signed a three-year comprehensive wage deal that recognises the mechanised mining requirements of the project as we take South Deep to full production. In Ghana, talks with the trade unions continued into 2016. A deal was concluded in Q1 2016, which resulted in employees in Ghana receiving a back-dated 5% salary increase for 2015.

### d) Social licence to operate

Despite a third year of adverse market conditions in 2015, Gold Fields continued to distribute value to a wide range of stakeholders, including employees, host governments, host communities, businesses and suppliers as well as the providers of risk capital.

In 2015, our total value distribution – reported according to World Gold Council methodology – was US\$2.43 billion (2014: US\$2.65 billion), with 69% going to businesses and suppliers

(2014: 69%), 8% to governments (2014: 7%), 18% to employees (2014: 18%), 5% to capital providers (2014: 5%) and 0.5% on socio-economic development programmes (2014: 1%) – mostly in host communities. The slight decline in the overall value distribution was largely due to a cutback in spending with business suppliers and partners amid lower operational expenditures.

The success of our business is critically dependent on the relationship with a number of key external stakeholders that determine both our regulatory and our social licences to operate: governments at national, regional and local level and, above all, the communities that host our mines. These stakeholders determine both our regulatory licence and social licence to operate, and we therefore devote considerable resources and energies in securing and maintaining these licences. This is not merely a compliance-based approach but one that seeks to ensure that we win the long-term support of governments and communities through the sustainable development of our mines and projects.

A number of elements are critical in achieving the support of these stakeholders: improved community relations and the related development of Shared Value projects and other investment projects in these communities, as well as the responsible management of environmental resources, particularly water. These resources, if not managed sustainably, can have an adverse impact on the environment or create social tensions with host communities, thus threatening our licences to operate.

### *Improved community relations*

The communities in which we operate are directly and often exclusively dependent on the sustainability and growth of our mines. One of the biggest challenges facing mining companies is building relationships and trust with these host communities, without which there is potential for operational disruption, project delays and cancellations.

It takes substantial time, effort and resources to establish and maintain a strong social licence to operate. Increasingly, our ability to grow Gold Fields through the expansion of existing mines and the development of new projects is determined by our ability to build strong relationships and trust with communities in our operating areas.

Gold Fields has invested heavily in communities through social investment projects and, more recently, through Shared Value projects (see p118). However, it is evident that mining companies need to expand and deepen their investment in and engagement with host communities, who have found their voice and are rightfully seeking a greater share of the benefits of mining.

In response Gold Fields has implemented a range of initiatives, in addition to the work already being done, including:

- ▶ Boosting the capacity of our community relations teams
- ▶ Working with peer companies to jointly address community needs, such as the alliance with Sibanye Gold in the Westonaria municipality, home to our South Deep mine in South Africa
- ▶ Supporting the ability of the South Deep Trusts as well as foundations in Peru, Ghana and Australia to deliver benefits to host communities more effectively
- ▶ Expanding the quantity and quality of Shared Value projects

At South Deep in particular, we have intensified our community investment work after we commissioned independent surveys among our host communities in Westonaria, which revealed a significant relationship gap between the mine and these communities.

Based on these findings, South Deep has strengthened and restructured its community relations and stakeholder engagement capacity. At the same time, the community investment programmes are increasingly focused on sourcing goods and services from enterprises in these communities and increasing

local employment opportunities. This will require a significant investment in training and skills development, but is an investment that is essential for our long-term sustainability.

Host community procurement and employment are critical pillars of our community investment strategies at all our operations in developing countries. At present host community employment accounts for 29% of our workforce in Peru, 50% at South Deep and 67% at our Ghanaian operations. The respective numbers for host community procurement spend are 7%, 10% and 9% respectively. In Australia 90% of our workforce and 66% of procurement is from Western Australia, which is classified as the host region. Gold Fields will continue to look at ways to increase local employment and procurement opportunities in 2016.

### *Shared Value*

Our contribution to host communities is on a more sustainable footing now that we have implemented the Shared Value approach to structure part of our investments in community projects with a focus on social and economic benefits rather than just social spend. We are gaining valuable experience with each project that we are undertaking.

To date, our regions have implemented five Shared Value projects ranging from the promotion of mathematics and science education among South Deep's host communities to multilateral water management projects at Cerro Corona and increased sourcing from community suppliers at all our mines. Our Ghanaian mines are working with government to build a tar road to connect our two mines and adjacent communities.

### *Reducing energy and carbon emissions*

Energy remains a major performance driver at 22% of Group operating costs in 2015, having risen from 18% in 2013, amid increasing energy demand and supply constraints in all of our operating regions. Unless we act to find more cost effective and alternative energy sources, this trend

## 2.2 CEO report (continued)

will continue in future. As part of the Integrated Energy and Carbon Management strategy, implemented in 2013, each of our regions has set energy reduction targets, which have already delivered around US\$30 million in cumulative savings from 2013 to 2015 (against plans). This equates to energy savings of around 7% against our business plans over the period and had the additional benefit of leading to 9% savings in our CO<sub>2</sub>-equivalent emissions.

At the same time, the regions have been tasked with securing access to future energy sources. In Ghana, where our mines were asked by the government to reduce their electricity consumption by 25% – 30% during 2015, the operations have reached an agreement with a private utility that will deliver the bulk of their energy requirements within the next two years. In Peru and Australia, new long-term supply agreements have been signed with utilities.

While South Deep has a long-standing agreement with the state-owned utility to implement load-curtailment programmes, we have solicited proposals for an on-site 40MW photovoltaic solar plant. Other non-carbon energy projects we are developing include a gas plant at our Granny Smith mine in Australia to replace the diesel power station. We also remain committed to our goal of 20% renewable energy generation at all new projects. Greater use of renewables creates power price and supply stability and has the added benefit of reducing our carbon footprint, which is one of Gold Fields' key environmental priorities.

### Enhanced water management

Responsible water management remains a vital component of Gold Fields' licence to operate and social licence at all our operations and projects as water is becoming an increasingly scarce and expensive commodity 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.

The Group water management guideline, implemented in 2014, focused on water stewardship, including identifying opportunities to enhance water reuse, recycling and conservation practices at all operations. In 2015, the operations focused on identifying projects to support these objectives and by year-end a total of 20 initiatives were listed, such as the use of in-pit tailings at our St Ives and Tarkwa mines. A number of these initiatives are already being implemented and they are expected to deliver multiple benefits. These include cost savings, reduced impact in water scarce areas, improved regulatory compliance, identification and mitigation of water-related risks, reduction of mine closure liabilities and enhancing Gold Fields' social licence to operate.

### Operational overview

#### Australia

During 2015, the Group's four mines in Western Australia – St Ives, Agnew, Darlot and Granny Smith – collectively delivered a strong operational performance, with gold production of 988,000 ounces at an AIC of A\$1,211/oz (US\$912/oz), which was in line with full year guidance for the region of 983,000 ounces at an AIC of A\$1,210/oz (US\$965/oz). AIC in 2014 was A\$1,124/oz (US\$1,015/oz).

Compared to 2014, production decreased by 4% from 1,031,000 ounces mainly as a result of planned lower production from Granny Smith, Agnew and Darlot, offset by higher production from St Ives. Both St Ives and Granny Smith exceeded their guidance for the year, compensating for Darlot and Agnew, both of which did not achieve their guidance.

Net operating costs in the region decreased by 7% from A\$799 million (US\$721 million) to A\$747 million (US\$562 million), mainly due to good cost control, while capital expenditure increased from A\$304 million (US\$274 million) to A\$373 million

(US\$281 million) mainly as a result of the opening up and development of new ore sources at the various mines as well as higher expenditure on near-mine exploration across the region.

The region reported net cash inflow of A\$338 million (US\$255 million) during 2015.

#### Ghana

Gold Fields' two mines in Ghana, Tarkwa and Damang, produced a strong operational performance in 2015 with total managed gold production of 753,900 ounces which was 2% higher than the 736,000 ounces produced in 2014.

Strong cost management ensured a 7% decrease in net operating costs from US\$551 million in 2014 to US\$513 million in 2015, while capital expenditure increased from US\$190 million in 2014 to US\$221 million in 2015. As a consequence, AIC for the region of US\$1,049/oz was 4% better than the US\$1,094/oz reported in 2014 and 13% ahead of guidance. The aggregate performance of the region was outstanding, underpinned by the strong showing of Tarkwa and despite the significant operational challenges faced by Damang. The region as a whole reported net cash inflow of US\$44 million during 2015 of which Tarkwa contributed US\$76 million while Damang had a negative cash flow of US\$32 million for the year.

Damang's reduced output and higher costs have prompted Gold Fields to evaluate various future options for the mine. We expect to complete this work before the middle of 2016 and announce a decision on the mine's future then.

#### Peru

Despite the significant decline in the price of copper during 2015, Cerro Corona in Peru recorded a relatively good performance with total managed gold equivalent production of 295,600 ounces in 2015, 6% ahead of guidance. However, it was 9% lower than the 326,600 ounces

produced in 2014, as a result of the lower copper price and a planned decline in gold and copper grades.

Net operating costs decreased by 9% from US\$158 million in 2014 to US\$145 million in 2015, mainly due to good cost management and lower ore tonnes mined, while capital expenditure increased from US\$51 million in 2014 to US\$65 million in 2015. The region reported net cash inflow of US\$35 million during 2015.

Total AIC amounted to US\$718/oz in 2015 compared with US\$316/oz in 2014 due to lower gold sold, lower by-product credits and higher capital expenditure, partially offset by lower net operating costs. On a gold equivalent only basis AIC rose from US\$702/oz in 2014 to US\$777/oz in 2015.

### South Africa

At the South Deep mine production remained steady during 2015 with production of 198,000 ounces compared with 200,500 ounces in 2014, mainly due to lower grades, partially offset by increased volumes. Higher wage hikes and rises in other operating costs led to net operating costs increasing by 13% from R2.66 billion (US\$246 million) in 2014 to R3 billion (US\$237 million) in 2015. Capital expenditure at South Deep decreased from R994 million (US\$92 million) in 2014 to R848 million (US\$67 million) in 2015.

AIC of R635,622/kg (US\$1,559/oz) in 2015 compared with AIC of R602,363/kg (US\$1,732/oz) in 2014 due to lower gold sold and higher operating costs, partially offset by lower capital expenditure.

South Deep's net cash outflow reduced sharply from US\$116 million in 2014 to US\$80 million in 2015.

Progress on the re-basing of the South Deep mine can be found on pages 21 and 73.

### Stakeholder relations

Gold Fields' prosperity in the short and longer term is – as I have stated before – critically dependent on societal acceptance. This can only be

achieved through transparent and mutually beneficial relationships with governments at all levels (national, regional and local), organised labour and host communities, who might disrupt our operations. Our corporate and regional management teams have been tasked with intensifying stakeholder engagements in 2016 to ensure that we operate in a business environment that allows us to operate profitably to the benefit of these stakeholders and others. As part of this, we have completed an extensive relationship assessment exercise at South Deep and are starting this progress in Ghana and Peru in 2016.

The appeal to governments is particularly urgent in South Africa and Ghana, where pending legislation and regulations have the potential to adversely affect the mining sector. In Peru, poor relations with communities and activists are threatening the growth of the entire mining sector and all stakeholders need to work together to address these challenges.

In South Africa, Gold Fields has dedicated substantial human and capital resources towards meeting the targets of the 2010 Mining Charter, including the equity empowerment target of 26% ownership. We will commit similar resources in achieving the continued transformation of the sector to make South Deep truly representative of the South African population.

True transformation will take time and cannot happen without the financial backing of investors, many of whom have fled the sector over the past few years amid poor returns on their capital. We welcome the South African government's commitment to engaging with the sector openly and honestly through Project Phakisa to devise an action plan for further growth and transformation that encourages renewed investment in the industry.

However, as it drafts critical policy based on these engagements we urge government to avoid additional fiscal or regulatory burdens that will inevitably further stifle the growth of the sector. Directly, and through the

Chamber of Mines, we are engaging the South African government on three key issues in 2016: the review of the Mining Charter; the once-empowered, always-empowered principle in Black Economic Empowerment ownership of mining companies; and, the finalisation of amendments to the Mineral and Petroleum Resources Development Act.

In Ghana, our appeal to government is to finalise and implement the long-awaited investment agreement that is critical for Gold Fields to achieve a level investment playing field with its peers in the country. Other investments in the sector would also be supported by a level playing field and without it, we fear, the much-needed economic growth linked to mining in Ghana will not occur.

In Peru, the mining industry is working closely with government to find joint solutions to the social and environmental issues that appear to be the root causes for the distrust towards the sector by communities. Engagement with these communities and their representative organisations will have to be the critical next step.

I would like to reiterate a commitment I have made on a number of occasions. For the mining sector to benefit all its stakeholders we have to work in partnership to grow the mining economy – to expand, not shrink, the 'mining pie'. Distributing smaller slices of a shrinking mining pie will inevitably lead to a gradual decline in the industry.

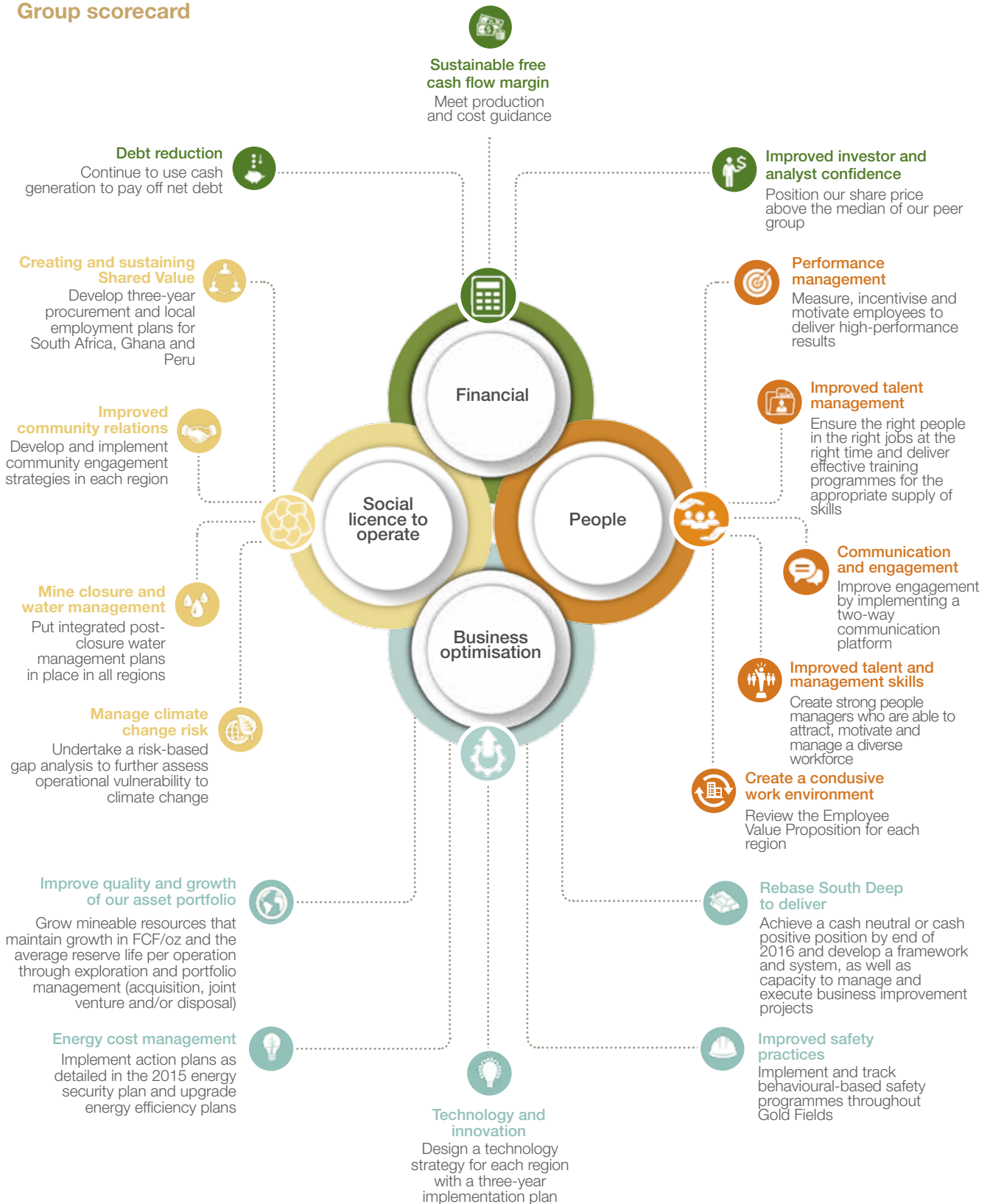
### Strategic priorities and guidance for 2016

The 2016 Group scorecard is displayed on the next page.

The pillars of Gold Fields strategy are firmly in place and have successfully guided the transformation of the Group over the past three years. We do not envisage major changes to this strategy in the year ahead, though there has been a shift in emphasis in some of the key performance areas, which has led to an adjustment to some of the measurements.

## 2.2 CEO report (continued)

### Group scorecard



Gold Fields' strategic review for 2016 takes into account a continued depressed gold price and our budgets have been built around an anticipated average gold prices of US\$1,100/oz, A\$1,500/oz and R500,00/kg. This places renewed emphasis on business optimisation as a priority for our operations and we are guiding on an AIC of between US\$1,035/oz – US\$1,045/oz and an AISC of between US\$1,000/oz – US\$1,010/oz for 2016 compared with the 2015 actuals of US\$1,026/oz and US\$1,007/oz respectively. Capital expenditure for the year is forecast at US\$602 million (2015: US\$634 million).

Our production guidance for the year is 2.05 – 2.10 million ounces, a decline of at least 3% on the 2.16 million ounces achieved in 2015. Notable changes in 2016 include a reduction in production from the Australian region to 901,000 ounces; the negative impact of the lower copper price on Cerro Corona; lower production from Damang; and a 30% increase at South Deep to 257,000 ounces.

The main expected contributors to lower production in Australia in 2016 are as follows:

- ▶ At Granny Smith, mining of lower grade areas of the mine on Zones 90 and 100
- ▶ At St Ives, closure of Athena underground mine and outperformance on grade from Neptune ore in early 2015 at St Ives
- ▶ Deeper mining at Agnew and timing to access the new high grade FBH and Cinderella ore bodies
- ▶ Limited mining planned at Darlot pending further exploration success during the current year

The 30% increase in production from South Deep is expected to be driven mainly by an increase in available working places, an increase in productivity, fleet replacement and grade improvements.

Our portfolio of mines will continue to be evaluated in line with the operations' abilities to contribute towards the growth of the average reserve life per mine and free cash flow per ounce. In particular, we anticipate decisions on the long-term future of our Damang mine in Ghana and the Darlot mine in Australia. Growth will be driven, in the main, through brownfields exploration at our mines though we are also aggressively looking at value-accretive acquisitions.

An important addition to our 2016 scorecard is Technology and Innovation, with our regions having been tasked to develop and implement three-year technology plans in 2016. Gold Fields' size still suggests that we do not necessarily have to be pioneers of research and development in technology but fast adopters of best practice. However, recent advances in digitisation, automation and mechanisation make it critical that we develop strategies to implement new technologies and partner with IT companies and Original Equipment Manufacturers (OEMs) that are leaders in the field. We have appointed a new member to our Executive Committee (ExCo) to oversee our progress in this area.

### Integrated thinking

As I discussed last year, the sustainability of our business is ensured by understanding the linkages between all of the inputs and outputs of our operations, enabling us to maximise the benefits for all stakeholders and reduce the risks to the business. Integrated thinking underpins this approach and while many of our processes and linkages are formalised they are not as fully articulated in our integrated reporting. This will be one of my priorities in 2016; the objective will be to explain in greater detail how integrated thinking is factored into our business decisions. Our integrated reporting will be an output of this thinking.

### Vote of thanks

I would like to express my gratitude to my fellow directors, led by our Chairperson, Cheryl Carolus. Their sound experience and guidance to the executive management team ensured that Gold Fields is reaping the rewards of its transformation strategy, whose implementation demanded so much of their time, energy and wealth of experience. I would also like to welcome Steven Reid to the Board. He joined in February 2016 and brings with him 35 years of experience in the mining industry.

The composition of the ExCo remained steady since January 2015, when Avishkar Nagaser joined as Head of Investor Relations. The ExCo team provided the renewed energy, input and experience to see the Group through the sometimes difficult and painful restructuring and is now ensuring that we stay the course. Subsequent to year-end we have appointed Richard Butcher as Executive Vice-President Technical. He joined us from Australia's MMG and will bring 30 years' experience in technical services in the mining industry to this new ExCo position.

Finally, I would like to express my sincere gratitude to all the employees of Gold Fields who continue to astound me with the resilience, commitment and long hours they put in to ensure the operational and financial success of the Group. The Gold Fields team rivals any of our peers in terms of experience, technical ability and, above all, enthusiasm and energy. I am proud to lead them.



**Nick Holland**  
CEO

## 2.2 CEO report (continued)

### The mine of the future – looking ahead

This is a summary of a presentation Gold Fields' CEO, Nick Holland, gave at the Future Mining Conference 2015 hosted by the Australian Institute of Mining & Metallurgy in Sydney in November last year. The full presentation can be found on our website at [www.goldfields.co.za/pdf/presentations/2015/gold\\_fields\\_mine\\_of\\_the\\_future\\_28102015.pdf](http://www.goldfields.co.za/pdf/presentations/2015/gold_fields_mine_of_the_future_28102015.pdf)

Gold mining remains relevant and valuable in today's global economy. But for mines to prosper in the long term they have to transform themselves into mines of the future – mines that are sustainable and create value for all their stakeholders.

Gold mining's contribution to the global economy is significant: 60% of the top 30 gold-producing countries are in the low or lower-middle income bracket. Over US\$171 billion per annum is added to total GDP from mining. The global gold mining industry employs 4.2 million people directly and indirectly, with a 5 – 10 dependency ratio for each direct employee. Despite what the gold bears think and say, gold has continued to be a safe haven during times of world crises, from the oil shock of 1975, the Soviet/Afghan war and Iranian revolution in the early 1980s, the stock market crash in 1987 and the latest financial crisis that started in 2008.

However, of late the industry has been confronted by a number of headwinds, which present significant risks to its long-term wellbeing. Today it takes an average of 18 years from discovery of gold to first production compared to 10 years a decade ago. While the grade of gold has fallen 3% per annum since 2000 and prices are dropping, cost inflation is ever-present. Both governments and communities are demanding greater benefits and incidents of clashes with local communities have risen 22% per year over the past 10 years.

Throw in a gold price that has declined by around 35% since its peak in September 2011, and it is not surprising that the sector has seen shareholder value slump by between 50% – 80% since 2007.

At Gold Fields, we recognised that a new recipe is required for the Company – and the industry – to overcome these challenges. The gold mine of the future has to be set-up, structured and managed differently from what it is today if it is to remain relevant and value-adding to all its stakeholders. This will require a focus on four key areas: operating practices and technology, talent and leadership, partnerships with key stakeholders and industry partners as well as governance and transparency.

The key operational challenges confronting gold mining can be grouped under five major headings:

- ▶ Embracing digital mining, advanced analytics and new software technologies
- ▶ Mining on demand, being the ability to run agile production schedules
- ▶ Converting conventional mining practices to mechanisation and automation
- ▶ Improving the economics of low grade and residual ore bodies
- ▶ Embracing energy and water efficiencies

Optimising existing technologies and new technologies will provide the solutions to these challenges, but adoption by the industry has been slow, particularly in developing countries. Mines in Australia on the other hand have been rolling out new technologies with a significant impact on costs, productivities and safety. If mines in other countries want to be sustainable they will have to follow this course.

A further feature of the mining industry's technological transformation will be ever-closer co-operation with OEMs. These OEMs develop and operate best-of-

class technologies and equipment at various levels of automation. It makes sense for mines to contract OEMs to utilise their expertise. This is particularly critical in South Africa's gold industry, where the next big mining drive will have to take place in ever deeper and dangerous conditions. Technologies such as remote pillar mining and raise boring will only be possible in co-operation with OEMs and technology companies.

At South Deep, Gold Fields is in many ways pioneering bulk, deep-level, mechanised gold mining on a significant scale. The skills of operating and optimising of equipment don't come easy in a mining culture that has been overwhelmingly conventional mining. But we are making gradual progress in setting the base for what could well be South Africa's last major gold mine.

A number of technology companies are working on software advances in mining, which can be grouped under the 'Big Data' heading, where data is captured by various sources, digitised, analysed and finally leveraged for better decision-making. This has multiple applications for mines, such as geological mapping, geotechnical design, fleet tracking and operator safety. We believe that such technologies will provide us with the edge to fundamentally change our cost structure and improve safety. To meet these technical challenges, the mining workforce of the future needs to be highly skilled, specialised and trained. Mining companies and universities will need to work together to develop and train the personnel required.



Without a doubt, the mine of the future will have a high-level skills set that will lead to a smaller overall workforce. This creates a dilemma for many gold miners as adjacent communities rely on them for jobs and procurement. We need to find a new model for community engagement where we train some community members for the new mine, but where we also encourage the development of the local economy, so it is not reliant on jobs or services from mining alone. While today's mining CEO manages assets, tomorrow's leaders will be strategists, focusing on coaching and mentoring, integrated stakeholder management, collaborative decision-making and managing a portfolio of mines. Operating decision-making will be devolved down to mine site level.

Forging partnerships, with an emphasis on joint ownership, risk management and shared benefits, will be an essential element of the mine of the future. One of the trends already in evidence is that mining companies are increasingly co-operating in developing and managing gold mines to achieve economies of scale and address

capacity constraints. Whether this trend will lead to a more formal consolidation of the gold sector remains to be seen.

The main benefits mines provide to society are job creation and paying taxes and royalties. But increasingly we are also seeing governments and miners work together in private-public partnerships, developing essential road, power and water infrastructure and supporting local governments in building educational and medical facilities. These partnerships, I believe, will increase in size and scope in future.

In so far as communities are concerned, we believe that the most direct benefits for communities can be achieved by implementing Shared Value projects in these communities, where they and the mine itself benefit from the creation of sustainable value. Should we go further than this by considering giving communities direct equity or participation in profit sharing in the mines in their area? That is something we, as the industry, should start debating as it could certainly assist in earning and maintaining our future social licences to operate.

I also believe that our employees and trade unions need to embrace a risk-reward relationship with the mines that will see them sharing the risks in downtimes and participating in the rewards of strong earnings growth in better times. Wage increases linked to productivity-based performance are also likely to become the norm in future.

Another area of focus for the mine of the future is transparency, in operational and financial performance, social development, managing environmental impact, regulatory adherence and corporate governance. The world is becoming more accountable and as mining companies, we need to embrace the change and meet the new standards.

Future gold mines will not succeed without the support of shareholders, governments, employees and communities. They are rightfully demanding to see the benefit of the resources we mine. This brings with it many challenges but through open engagement and partnerships, I believe we can create a successful gold mining company of the future.



> Employee in training at South Deep



## 2.3 Corporate governance

### Overview

Our vision of global leadership in sustainable gold mining, and our ability to fulfil our stakeholder promises requires the highest levels of corporate governance. This means an approach to governance that supports the proactive and effective management of those strategic dynamics that will ultimately determine our long-term sustainability, whether operational, economic, social, environmental or otherwise.

This approach 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. It requires us not only to ensure our business remains profitable but also to deliver clear economic, social and environmental benefits to our stakeholders.

Our management approach is underpinned by our commitment to sound and robust corporate governance standards, which are essential to our ultimate operational and strategic success. A key element of the approach is to ensure that the Company complies with all laws and regulations as well as the highest levels of corporate governance.

### Board of Directors

#### Board overview

The Board of Directors is the highest governing authority of the Group and the Board's Charter articulates its objectives and responsibilities. Likewise, each of the Board sub-committees operates in accordance with its written terms of reference, which are reviewed on an annual basis by the various Board committees. During 2015, the Board approved the establishment of a separate Risk Committee (p34).

The Board takes ultimate responsibility for the Company's adherence to sound corporate governance standards and sees to it that all business decisions and judgements are made with reasonable care, skill and diligence.

In terms of the Memorandum of Incorporation (MOI), the number of directors shall not be less than four and not more than fifteen. The Board currently comprises 10 directors, two of whom are executive directors and eight are independent non-executive directors. Advised by the Nominating and Governance Committee, the Board ensures that the election of independent directors falls on reputable persons of well-known competence and experience, who are willing to devote a sufficient part of their time to the Company. Each Board member offers a range of relevant knowledge, expertise and technical experience and business acumen, which enables them to exercise independent judgement in Board deliberations and decision-making. Furthermore, the Nominating and Governance Committee also ensures that the Board has adequate diversity in respect of race, gender, business, geographic and academic backgrounds.

The role of non-executive directors, who are independent of management, is to protect shareholders' interests, including those of minority shareholders. Furthermore, they ensure that individual directors or groups of directors are subject to appropriate scrutiny in their decision-making.

The roles of the Chair of the Board and the CEO are kept separate. Non-executive director Cheryl Carolus was the Chair of the Board and Nick Holland the CEO of Gold Fields for the entire period under review.

The Board is kept informed of all developments relating to the Group, primarily through the executive directors, executive management and the Company Secretary. Furthermore, the Board stays up-to-date through a number of other mechanisms, including employee climate surveys, newsletters and internal staff communication, among others.

Directors are required to declare personal interests on an annual basis and conflict of interest declarations are done quarterly and at Board meetings. Should a conflict of interest arise it is dealt with in terms of the Companies Act by the Board.

The non-executive directors are entitled to seek independent professional advice, at the Group's expense, on any matters pertaining to Gold Fields. They also have unrestricted access to the Group's management and access to the external auditors, when necessary. A brief curriculum vita for each Board member is set out on pages 36 – 37 of this report.

#### Chief Financial Officer

Paul Schmidt was appointed Chief Financial Officer (CFO) from 1 January 2009. In accordance with the JSE Limited Listings Requirements, the Audit Committee considered and agreed unanimously that the level of expertise and experience of Paul Schmidt was satisfactory during 2015.

The Audit Committee was of the opinion that Mr Schmidt, together with other members of his financial management team, had managed the Group's financial affairs effectively during the 2015 financial year.

## 2.3 Corporate governance (continued)

### Board appointments and rotation

Directors are appointed through a formal process, and the Nomination and Governance Committee assists in identifying suitable candidates and evaluating candidates from time to time. The Chair is appointed on an annual basis by the Board after a review of the Chair's performance and independence. In line with recommendations by the King III Code, the Board carries out a thorough evaluation of the independence of directors annually and specifically where Board members have served on the Board for nine years or more.

The Nominating and Governance Committee also develops and facilitates an induction programme with management for new members of the Board to ensure their understanding of Gold Fields and the business environment in which it operates.

In accordance with Gold Fields' MOI, one-third of all directors (including executive directors) shall retire from office at each Annual General Meeting. The first to retire are those directors appointed as additional members of the Board during the year, followed by the longest serving members. Retiring directors can be re-elected immediately by the shareholders at the Annual General Meeting.

The Board, assisted by the Nominating and Governance Committee, recommends the eligibility of retiring directors (subject to availability and their contribution to the business) for re-appointment. The MOI can be found on the Gold Fields website at [http://www.goldfields.co.za/au\\_standards.php](http://www.goldfields.co.za/au_standards.php).

The Board appointed Rick Menell as Deputy Chair, effective 19 August 2015. After year-end Steven Reid joined the Board as an independent non-executive director.

### Directors' dealings in shares of Gold Fields

Gold Fields Board members and employees are informed of closed and prohibited periods for share dealings by the Company Secretary. Closed and prohibited periods remain in force until final annual and now bi-annual results are published. This was done on a quarterly basis during 2015. Similar closed periods will be in place should the Company trade under a cautionary announcement. Any directors' dealings (including executive directors) require the pre-approval of the Chairperson and the Company Secretary keeps a register of such dealings.

### Board remuneration

Non-executive Board members are remunerated for their services as non-executive Board members, the separate Committees' they sit on annually, and where applicable, travel expenses to attend Board meetings. Shareholders approve these fees on an annual basis at the Company's Annual General Meeting.

Further details on non-executive directors and executive directors' remuneration can be found on page 135.

### Board of Directors' Charter

During the year, the Board reviewed the Board of Directors' Charter to align it to the recommendations of the King III Code of Corporate Governance (King III). The application of the King III principles at Gold Fields can be found on our website at [http://www.goldfields.co.za/au\\_standards.php](http://www.goldfields.co.za/au_standards.php).

The Charter compels directors to promote the Vision of the Company while upholding sound principles of corporate governance. Other

directors' responsibilities under the Charter include:

- Determining the Company's Code of Ethics and conducting its affairs in a professional manner, upholding the core values of integrity, transparency and enterprise
- Evaluating, determining and ensuring the implementation of corporate strategy and policy
- Determining compensation, development, and other relevant policies for employees
- Developing and setting best-practice disclosure and reporting practices that meet the needs of all stakeholders
- Authorising and controlling capital expenditure and reviewing investment capital and funding proposals
- Constantly updating the risk management systems, including setting management expenditure authorisation levels and exposure limit guidelines
- Reviewing executive succession planning and endorsing senior executive appointments, organisational changes and general remuneration policies. In this, the Board is guided by the Remuneration Committee as well as the Nominating and Governance Committee

### Company Secretary

The Company Secretary provides company secretarial services, oversees Board governance processes in relation to the Board (in accordance with JSE Listings Requirements) and attends all Board and Board Committee meetings, other than the Remuneration Committee. The Board has access to the Company Secretary, who guides the directors on their duties and responsibilities. During the year under review, the Company Secretary oversaw ongoing training of the directors and assisted the Board and its committees, with annual plans, agendas, minutes and terms of reference.

The Company Secretary for the year under review was Lucy Mokoka, and the Board is satisfied that Ms Mokoka is competent, qualified and has the necessary expertise and experience to fulfil the role. The Company Secretary is not a director of the Group and has an arm's-length relationship with the Board.

**Board attendance**

The Board is required to meet at least four times a year. It convened six times during 2015 as two special Board meetings were held to deliberate on urgent substantive matters. A meeting of the Board may be conducted by electronic communication in terms of the Board Charter.

All directors are provided with the necessary information through comprehensive Board packs prepared by management in advance of each Board or committee meeting to enable them to discharge their responsibilities effectively.

*Number of Board meetings, Board Committees meetings and directors' attendance during the year*

Directors	Board Meetings	Special Board Meetings	Audit Committee	Safety, Health and Sustainability Committee	Capital Projects Committee	Remuneration Committee	Social and Ethics Committee	Nominating and Governance Committee
No. of meetings per year	4	2	7 <sup>1</sup>	4	4	4	4	4
CA Carolus <sup>2</sup>	4	2	–	4	2	4	4	4
K Ansah <sup>2</sup>	4	2	–	4	–	–	2	4
AR Hill	4	2	–	4	4	4	4	–
NJ Holland	4	2	7	4	4	4	4	4
RP Menell	4	2	7	4	4	–	4	–
DN Murray	4	2	–	4	4	–	4	–
DMJ Ncube <sup>2</sup>	4	2	7	1	–	4	4	4
PA Schmidt	4	2	7	–	–	–	–	–
GM Wilson	4	2	7	–	4	4	4	–

'–' denotes that the Board member is not a member of the Committee

<sup>1</sup> This included a second, unscheduled, review meeting of the Integrated Annual Report

<sup>2</sup> During the latter part of 2015, it was agreed that certain Board Members attend the following Committees as invitees going forward. CA Carolus – Capital Projects Committee, K Ansah – Social and Ethics Committee and DMJ Ncube – Safety, Health and Sustainability Committee

## 2.3 Corporate governance (continued)

The Board agenda and meeting structure focuses on strategy, sustainable development, finance, performance monitoring, governance and other related matters. During the period under review, the Board meetings and some committee meetings were preceded by closed session meetings of non-executive directors. The Board members also attended a multi-day strategy session on the Company.

### Application of King III within Gold Fields

The Board's Charter is aligned to the King III corporate governance report and is reviewed annually. King III is endorsed by the JSE Limited and certain aspects of King III are included in the JSE Listing Requirements. The Board supports the recommendations on good governance contained in King III. The implementation and adherence to relevant King III principles and recommendations across Gold Fields can be found at [https://www.goldfields.co.za/au\\_standards.php](https://www.goldfields.co.za/au_standards.php).

Similarly, the Group's reporting in terms of Section 3.84 of the JSE Listings Requirements on Board Governance processes can be found at [https://www.goldfields.co.za/au\\_standards.php](https://www.goldfields.co.za/au_standards.php).

### Board committees

The Board has established a number of standing committees in compliance with the South African Companies Act with delegated authority from the Board. The committee members are all independent non-executive directors, and the CEO and various members of management are permanent invitees to the committee meetings. Each Board committee is chaired by an independent non-executive director.

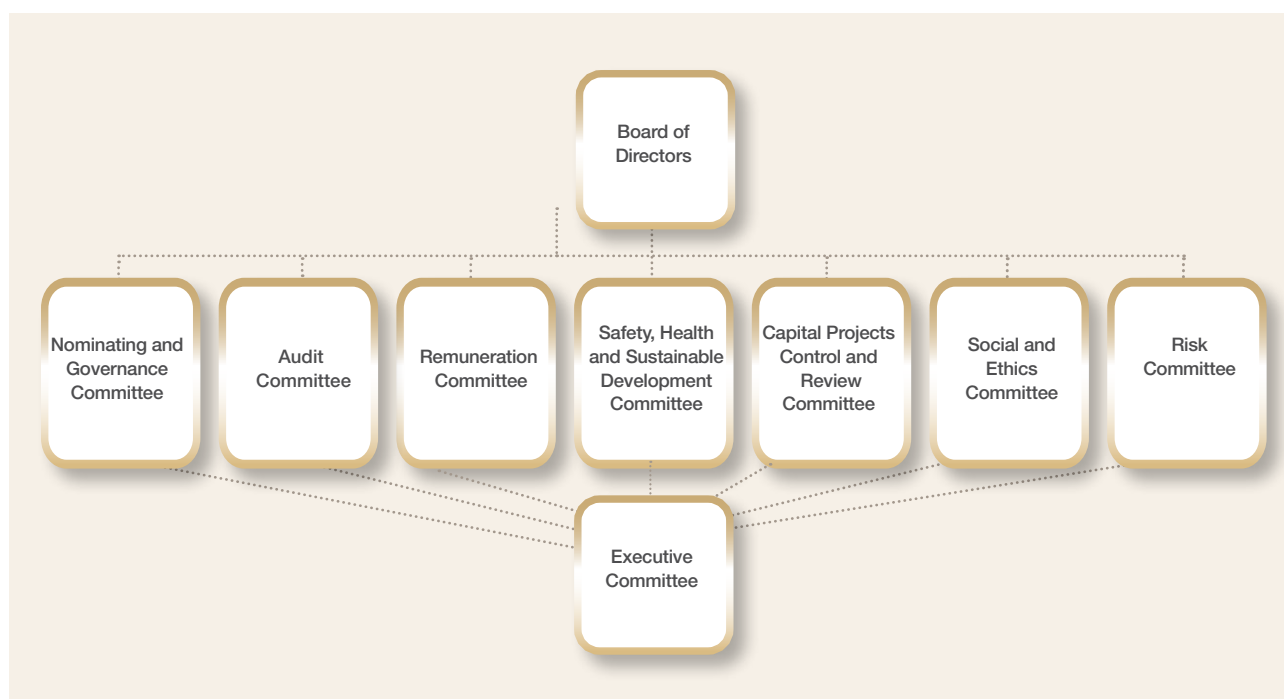
In February 2016, the Board reviewed the membership and structure of the Risk Committee, which historically was the sole responsibility of the Audit Committee. This Committee will continue to assist the Board in its oversight of the integrity and effectiveness of the

Gold Fields' risk management processes. Given the increased significance of risk management it was decided to move it under a standalone subcommittee.

Committees operate in accordance with written terms of reference and have a set list of responsibilities. These are outlined at [https://www.goldfields.com/au\\_standards.php](https://www.goldfields.com/au_standards.php). The charters of the Board and the committees can be found at [https://www.goldfields.co.za/au\\_standards.php](https://www.goldfields.co.za/au_standards.php).

In addition, the committees are required to evaluate their effectiveness and performance on an annual basis and to report the respective findings to the Board for consideration. In line with the King III recommendations, the Board annually reviews the terms of reference for all committees, and, if necessary, adopts changes which are approved by the Board.

The full Directors' Report is contained in the Annual Financial Report on pages 35 – 42.



## Standards, principles and systems

### Internal and external standards and principles

Internal standards and principles	Listings requirements	Sustainability standards	Business ethics and standards
<p>Gold Fields has developed a comprehensive set of internal standards and principles that underpin how we do business. These include:</p> <p>Our Vision and Values: Everything that we do to achieve our Vision of becoming the global leader in sustainable gold mining is informed by our Values. These are applied by our directors, as well as employees at every level of the Group</p> <p>Board of Directors' Charter: The Charter articulates the objectives and responsibilities of the Board. Likewise, each of the Board committees operates in accordance with written terms of reference that are regularly reviewed</p> <p>Sustainable Development Framework: Gold Fields' Sustainable Development Framework is based on best practice, as well as our operational requirements. The framework is governed by an overall Sustainable Development Policy</p> <p>The Group has developed a range of guidelines that directs business conduct in those areas (<a href="https://www.goldfields.com/au_standards.php">https://www.goldfields.com/au_standards.php</a>)</p> <p>Code of Ethics: The Gold Fields Code of Ethics commits and binds every employee, officer and director within Gold Fields to conducting business in an ethical and fair manner. The Board's Audit and Social and Ethics Committees are tasked with ensuring the consistent application of, and adherence to, the Code. The Code is on our website at <a href="https://www.goldfields.com/au_ethics.php">https://www.goldfields.com/au_ethics.php</a></p>	<p>Our primary listing is on the JSE Limited (JSE) and we are subject to the JSE Listings Requirements</p> <p>Gold Fields has a secondary listing on the New York Stock Exchange (NYSE) and therefore, as a foreign issuer, subject to the NYSE Listings Requirements, the provisions of the US Securities and Exchange Commission, as well as the terms of the Sarbanes-Oxley Act (2002)</p> <p>Gold Fields is also listed on the Swiss Exchange (SWX)</p> <p>We have implemented South Africa's King III principles and recommendations across Gold Fields</p>	<p>Our Sustainable Development Framework is guided by the International Council on Mining and Metals' (ICMM) 10 principles on sustainable development, their supporting position statements and external assurance thereof</p> <p>We are guided by the 10 principles of the UN Global Compact (in which we are a participant), including their implementation in our business activities, and the annual submission of the Communication on Progress Report</p> <p>All of our eligible operations conform with the World Gold Council Conflict-Free Gold Standard. A copy of our Conflict-Free Gold Report, our Statement of Conformance, together with the independent limited assurance opinion can be viewed online at <a href="https://www.goldfields.co.za/sus_reporting.php">https://www.goldfields.co.za/sus_reporting.php</a></p> <p>Our reporting is guided by the internationally recognised Global Reporting Initiative (GRI) G4-Core Sustainability Reporting Guidelines, including the Mining and Metals Sector Supplement. Our 2015 GRI submission can be viewed online at <a href="https://www.goldfields.co.za/sus_reporting.php">https://www.goldfields.co.za/sus_reporting.php</a></p> <p>A number of environmental and safety standards, including ISO 14001, OHSAS 18001 and the International Cynide Management Code</p>	<p>Our Code of Ethics is aligned with national and international business ethics and anti-corruption standards, including the UN Convention against Corruption (2003) and the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1997)</p> <p>We support the principles and processes of the Extractive Industry Transparency Initiative (EITI), through our membership of the ICMM. Ghana and Peru are the EITI-compliant countries in which we operate</p> <p>King III as well as the Prevention and Combating of Corrupt Activities Act (2004)</p> <p>The United States' Sarbanes-Oxley Act (2002), Dodd-Frank Act (2010) and the Foreign Corrupt Practices Act (1977)</p> <p>All relevant regulations and legislations in jurisdictions in which Gold Fields operates</p>

## 2.3 Corporate governance (continued)



### Directors

#### Non-executive directors

##### 1. Cheryl A Carolus (57) Chair

*BA Law; Bachelor of Education, University of the Western Cape*

Ms Carolus was appointed a director of Gold Fields on 10 March 2009 and was appointed as the Chair on 14 February 2013. She is Executive Chair of Peotona Group Holdings. She is a director of a number of other public and private companies, including Investec and De Beers, and she also serves *pro bono* on non-profit organisations, including the World Wildlife Fund and The British Museum. She served as South Africa's High Commissioner to the United Kingdom from 2001 to 2004, Chairperson of the South African National Parks board for six years and Chairperson of South African Airways from 2009 to 2012. She was awarded an honorary doctorate in law from the University of Cape Town for her contribution to freedom and human rights. In 2014, she was awarded the French National Order of Merit by the Government of France.

##### 2. Richard P Menell (60) Deputy Chair

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

Mr Menell was appointed a director of Gold Fields on 8 October 2008 and was appointed as Deputy Chair on 19 August 2015. He became a non-executive director of Sibanye Gold on 1 January 2013. Mr Menell has over 37 years' experience in the mining industry, including service as President of the Chamber of Mines of South Africa, President and CEO of Teal Exploration & Mining, as well as executive Chair of Anglovaal Mining and Avgold. He is a director of Weir Group Plc and Rockwell Diamonds Inc, as well as Senior Adviser to Credit Suisse. He also serves as a director of a number of unlisted companies and non-profit organisations.

##### 3. Kofi Ansah (71)

*BSc (Mechanical Engineering), UST Ghana; MSc (Metallurgy), Georgia Institute of Technology*

Mr Ansah was appointed a director of Gold Fields in April 2004. He also serves as a director of Ecobank (Ghana) Limited. From

1984 to 1999, he was the Chief Executive of the Ghana Minerals Commission. He is currently a mining and energy consultant.

##### 4. Alan R Hill (73)

*BSc (Hons); MPhil (Rock Mechanics), Leeds University*

Mr Hill joined the Board on 21 August 2009. On 2 October 2010, he was appointed the CEO and executive Chair of Teranga Gold Corporation and non-executive Chair in 2013. After graduating, Mr Hill worked for a number of mining firms before joining Barrick Gold in 1984. He spent 19 years with Barrick from which he retired in 2003 as Executive Vice-President: Development.

##### 5. David N Murray (71)

*BA (Hons) Econ; MBA, University of Cape Town*

Mr Murray was appointed a director of Gold Fields on 1 January 2008. He has more than 40 years' experience in the mining industry and has been CEO of Rio Tinto Portugal, Rio Tinto Brazil, TVX Gold Inc, Avgold and Avmin. He also served as a non-executive director of Ivernia Inc.





**6. Donald MJ Ncube (68)**

*BA (Economics) and Political Science, Fort Hare University; Postgraduate Diploma in Labour Relations, Strathclyde University, Scotland; Graduate MSc (Manpower Studies), University of Manchester; Diploma in Financial Management; Honorary Doctorate in Commerce, University of the Transkei*

Mr Ncube was appointed a director of Gold Fields on 15 February 2006. Previously, he was an alternate director of Anglo American Industrial Corporation and Anglo American Corporation, a director of AngloGold Ashanti as well as non-executive Chair of South African Airways. He is currently executive Chair of Badimo Gas and Managing Director of Vula Mining Supplies.

**7. Steven Reid (60)**

*Bachelor of Applied Science in Mineral Engineering (Mining), South Australia Institute of Technology; MBA, Trium NYU/LSE/HEC; Directors' Education Program, Institute of Corporate Directors*

Mr Reid was appointed as a director of Gold Fields on 1 February 2016. He has over 35 years' international business experience and has held senior leadership roles in numerous countries.

He has served as a director of Silver Standard Resources since January 2013 and a director of Eldorado Gold since May 2013. He served as Chief Operating Officer of Goldcorp from January 2007 until his retirement in September 2012, and was the company's Executive Vice President, Canada and USA. Before joining Goldcorp, Mr Reid spent 13 years at Placer Dome in numerous corporate, mine management and operating roles, including country manager for their Canadian operations. He also held leadership positions at Kingsgate Consolidated and Newcrest Mining, where he was responsible for running the Asian and Australian operations.

**8. Gayle M Wilson (71)**

*BCom; BCompt (Hons) Unisa; CA(SA)*

Ms Wilson was appointed a director on 1 August 2008. She was previously an audit partner at Ernst & Young for 16 years, where her main focus was on listed gold and platinum mining clients. She was lead partner on the global audit of AngloGold Ashanti and other mining clients during her career included Northam Platinum, Aquarius Platinum, Avmin (now African Rainbow Minerals) and certain Anglo Platinum operations.

**Executive Directors**

**9. Nicholas J Holland (57)  
Chief Executive Officer (CEO)**

*BCom, BAcc, University of the Witwatersrand; CA(SA)*

Mr Holland was appointed an executive director of Gold Fields in 1997 and became CEO on 1 May 2008. Prior to that, he was the Company's CFO. Mr Holland has more than 36 years' experience in financial management, of which 26 years were in the mining industry. Prior to joining Gold Fields, he was Financial Director and Senior Manager of Corporate Finance at Gencor.

**10. Paul A Schmidt (48)  
Chief Financial Officer (CFO)**

*BCom, University of the Witwatersrand; BCompt (Hons), Unisa; CA(SA)*

Mr Schmidt was appointed CFO on 1 January 2009 and joined the Board on 6 November 2009. Prior to this, he held the positions of acting CFO from 1 May 2008 and Financial Controller from 1 April 2003. He has more than 20 years' experience in the mining industry.

## 2.3 Corporate governance (continued)

### Compliance and ethics

Gold Fields is committed to acting responsibly, honestly and with respect for others. This means going ‘beyond compliance’ and applying the highest ethical standards, so the Group can continue to enjoy the confidence of its investors, business partners, employees, host governments and community members.

#### Legal, ethical and regulatory compliance

##### Regulatory compliance

As Gold Fields operates in various jurisdictions, the legal and regulatory environment is an ever changing one which can lead to complex matters. In order to manage this effectively and efficiently, and enhance risk mitigation strategies, Gold Fields has established a risk-based Group compliance programme to provide the highest levels of assurance for regulatory compliance. In terms of the programme, Gold Fields:

- ▶ Identifies and consistently reviews all statutes in its operating jurisdictions and assesses the exposure to non-compliance and regulatory risks
- ▶ Ensures that the internal control environment is aligned to prioritised risks encompassed in statutory requirements
- ▶ Conducts reviews by Internal Audit to assess that appropriate measures are implemented and that controls are effective to mitigate and manage risk

A Group compliance index has been developed to accommodate changes within the business, applicable statutes, as well as compliance and regulatory risks. The programme and associated internal controls will be assured by management, internal audit and external assurers on an annual basis.

##### Ethics

Gold Fields has a zero tolerance approach to any activities that undermine the legitimate business environment and all directors and employees are bound by its Code of Ethics. The Code articulates Gold Fields policy with respect to an array of activities, transactions, engagements and conduct. Implementation of the Code is supported by:

- ▶ An online ethics portal
- ▶ Well-defined responsibilities and accountabilities
- ▶ Stringent internal reporting processes
- ▶ An anonymous whistle-blowing hotline managed by an independent third party (Deloitte)
- ▶ Annual training for all employees, especially training for those in high-risk roles
- ▶ Gold Fields is rolling out training to suppliers on ethics and regulatory matters in our various jurisdictions

Breaches of the Code will result in disciplinary action, which can lead to dismissal or even criminal prosecutions. The Code of Ethics can be found on Gold Fields’ website at [www.goldfields.com/au\\_ethics.php](http://www.goldfields.com/au_ethics.php).

### External organisations

Increasingly, the reputational and operational risks of companies are tied to external parties who form part of a company’s value chain and Gold Fields strives to develop and maintain strong relationships with these parties. During 2015, Gold Fields implemented a due diligence application to establish the risk profiles of external suppliers and contractors by monitoring a range of local and international databases. The application concentrates on the financial, environmental, social, governance and labour performance of the external parties.

The outcomes of the screening exercise are filtered through to regional risk management processes and used by the regions to decide on the appointment of external suppliers and contractors and, where applicable, the continuation of existing relationships.

Gold Fields’ procurement processes are designed to ensure suppliers adhere to the Group’s policies and standards. All agreements entered into by suppliers and contractors require suppliers to comply with all relevant legislation, best practice standards and Gold Fields policies and procedures that the Group adheres to. Furthermore, Gold Fields has the right to audit the supplier or contractor’s processes to ensure compliance. Furthermore, on a regular basis, all suppliers are required to attest to their compliance with all applicable regulations governing their business.

# 2.4 Operating context

## Strategic trends

Like other companies, Gold Fields is subject to a range of external strategic dynamics that inform decision-making, and influence both current and future business performance. Analysis of three of these key strategic issues – and how Gold Fields is responding to them – is set out below.

## Gold supply and demand

### Issue

The price of gold has fallen by around 45% between 2011 and 2015. Since then it has recovered and in early March 2016 was trading at levels of around US\$1,200/oz – US\$1,250/oz. More than any other variable, the gold price is the key dynamic informing our business

strategy and the volatility of the price over the past few years has been one of the key reasons for the restructuring journey on which we have embarked.

Much of the traditional investor case for gold as a safe haven has come under pressure over the past four years. In 2012, investor demand eased as it became apparent that many of the feared economic worst-case scenarios were unlikely to materialise. The gold price subsequently retreated to sub-2011 levels – just as the equity and real estate markets started to offer stronger returns. As a result, many investors sold their physical gold holdings in 2013 and 2014 – resulting in a sharp drop in the gold price.

The gold price continued to decline in 2015 by 8% year-on-year amid slowing demand and fears of an interest rate hike in the US – which did not materialise. On balance, the negative supply and demand trends have seen the average gold price received by Gold Fields decline to US\$ 1,140/oz in 2015 from a high of US\$1,656/oz in 2012.

While much of the gold price's short-term movements are the result of market sentiment, the longer-term movements remain underpinned by supply and demand fundamentals. An analysis of these fundamentals confirms our belief that the gold price will improve over the next few years though it will undoubtedly experience more short-term volatility.

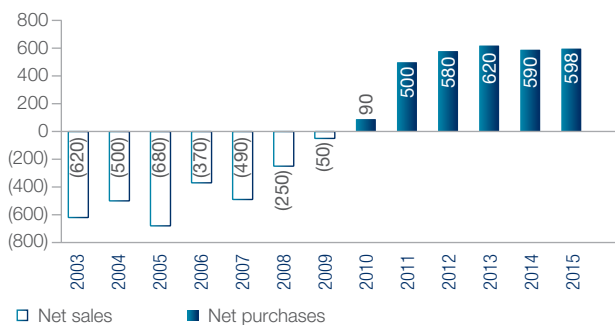
According to the World Gold Council, gold demand was little changed last year declining from 4,414 tonnes in 2014 to 4,258 tonnes in 2015.

However, in the longer term, key demand fundamentals are asserting themselves due to:

- ▶ Ongoing growth in emerging market demand for physical gold – in China, India and other countries. Jewellery demand in both countries rebounded in the second half of last year continuing a long-term trend which confirmed the inherent affinity of consumers in those countries to gold
- ▶ A continued build-up of gold reserves by the world's central banks (or, at least, maintaining their current holdings) amid economic and political uncertainty and reserve diversification away from the US Dollar. Net purchases by central banks and other official institutions totalled 588 tonnes in 2015, in line with the strong purchases of around 600 tonnes per annum for each of the preceding three years

## Central banks' net gold purchases

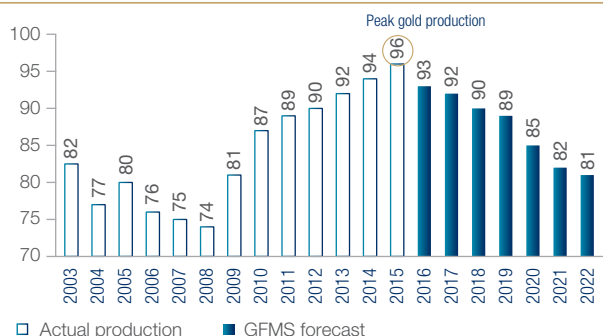
(Tonnes)



Source: Metals Focus; GFMS, Thomson Reuters; World Gold Council

## Global gold mine production

Annual mine production (Moz)



Source: GFMS

## 2.4 Operating context (continued)

- › The continued need for a safe haven asset in times of economic and political uncertainty. Though this may not have been as prevalent a factor over the past five years as previously used to be the case, the gold price's more recent recovery to levels of around US\$1,250/oz has been driven amid investor uncertainty in global stock markets

Long-term gold supply issues will also act to support a recovery in the gold price, we believe. According to the WGC total gold supply declined by 7% in Q4 2015, due to an estimated 4% drop in global mine output, the largest quarterly reduction since 2008. Total mine production for 2015 at 3,176 tonnes was only 1% higher than 2014 production, its slowest annual increase since 2008.

This trend is set to continue. The GFMS consultancy predicts a further drop in mine production in 2016, due to lower production at more mature mines, a decline in average grades at most gold operations and a lack of new mines coming on stream. Many analysts believe peak mine production was reached in 2015 coinciding with a high in gold discoveries in the mid-1990s and assuming an average 20-year development cycle. Goldman Sachs has stated that there may be only 20 years of known mineable reserves of gold left.

### Response

Gold Fields believes in gold. This means the Group will continue to focus on gold mining and will not hedge, on the basis that we believe:

- › The supply and demand fundamentals support a medium- to long-term recovery in the gold price
- › The Group's portfolio approach and strategic and mining expertise should provide returns for gold investors now and in the future

Gold Fields' ability to maximise value can be attributed to its strategic shift to cash flow generation by:

- › De-prioritising production volume
- › Setting cash flow targets and margins and linking short- and long-term management incentives to key deliverable criteria
- › Closing marginal mining operations at existing mines and selling non-strategic growth assets
- › Stopping all greenfields exploration and focusing on brownfields exploration

This strategy, conceived before the price of gold experienced a serious drop – means Gold Fields now enjoys a measure of resilience in the face of current market conditions. For example, all production is being planned around the delivery of a 15% free cash flow margin at a long-term planning gold price of US\$1,300/oz. This means the Group is in a relatively strong position to weather a sustained low gold price and/or further falls in the price of gold (should they re-occur). It also means Gold Fields will be particularly well-positioned to capture future upside and deliver superior leverage to investors when the gold price recovers. In such circumstances, Gold Fields is committed to maintaining discipline when the market becomes more buoyant, and to avoiding the temptation of producing incremental ounces.

This builds on Gold Fields' existing commitment to avoid 'high-grading' – due to the obvious negative impact this would have on the sustainability of its ore bodies. As such, Group guidance requires all operations to mine at or below their reserve grade. Gold Fields is also continuing to invest in the future of its mines. This includes the ongoing development of its ore bodies – and proactive near-mine exploration. These are strategic essentials that will in no way be compromised by the current price environment.

### 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, mining companies are dependent on their mineral deposits and cannot relocate to new locations when facing deteriorating local and/or national operating environments. Furthermore, many mines' lifecycles can span decades – and mines must be able to navigate complex social, economic and political dynamics over time.

To manage the potential risks, mining companies need to maximise their positive local impacts, minimise their negative local impacts and make sure that this is communicated to – and recognised by – host community stakeholders.

While many companies generate significant value for their host societies and governments – including through the generation of public revenues – this does not always benefit those host communities who bear the brunt of the direct negative impacts. Additional and targeted efforts need to be made to ensure host communities benefit directly from the presence of mines and have a direct interest in their continued and profitable operation.

#### Response

Gold Fields understands that it must satisfy immediate shareholder requirements for cash generation while securing the longer-term value of its assets. As a result, it also recognises that the long-term generation of value for shareholders will ultimately be supported by:

- › **Responsibility:** ongoing investment in responsible operational standards to avoid and mitigate negative social and environmental impacts. This includes effective water management, an increasingly

material issue for most mining companies and that can, if poorly managed, have a serious impact on local communities (p97)

- › **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 (p110) and social transformation.
- › **Understanding:** investment in communities relies on a thorough understanding of the risks, community needs and community perceptions. Since 2014, Gold Fields has undertaken relational proximity studies at its South Deep mine, which have revealed a gap in the mine's community investment programmes. This assessment survey is being extended to our Ghanaian and Peruvian operations.
- › **Shared Value:** the pursuit of cost-effective, mine-level business strategies that enhance the value of our own business and generate positive social impacts helps to ensure that interactions with local stakeholders are firmly based on mutual interest from the start. Gold Fields currently has four Shared Value pilot projects (p118). These are further supported by Gold Fields' broader, ongoing efforts to recruit employees and contractors from local communities – and to source goods and services from local companies (p110)

These efforts are particularly important in the low gold price context, which has significant impact on employees due to the potential for retrenchments and on the ability of the Group to invest in community development projects.

### Regulatory issues

Over the past four years the global gold mining industry has been severely impacted by falling commodity prices and rising input costs. Nonetheless, a forward-looking regulatory and fiscal environment should enable us to ride out these kinds of short-term fluctuations 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, partly driven by continued government-backed resource nationalism.

This has been fuelled by the actions of governments all over the world, which views the industry as an easy target for higher taxes and other fiscal imposts. As a result the governments' share of the 'mining pie' has grown at the expense of other stakeholders, especially workers and, crucially, the providers of capital.

### Strategic 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 gold sector and the wider mining industry, has sought to address this trust gap in a number of ways.

- › In 2013, Gold Fields was one of the drivers in the World Gold Council (WGC) to adopt greater transparency about the real costs of mining, with the introduction of new cost metrics, namely All-in Costs and All-in Sustaining Costs. This cost reporting is now entrenched in the sector
- › A number of recent economic studies show that, far from being a sunset industry, the socio-economic impact of mining

remains significant, particularly in developing countries. Mining tends to generate large numbers of indirect jobs and to enjoy significant economic multiplier effects

- › The impact of gold mining goes beyond economic growth and jobs. Gold Fields has adopted WGC methodology on total value distribution that shows the wider national impact mining has on the economy. Over the past three years, Gold Fields has consistently distributed between US\$2 billion and US\$3 billion to our wide range of stakeholders – accounting for around 90% of revenue on average (p11)
- › Increasingly, miners are seeking to have an impact not just on the national economy, but also on the local economy of the communities that live adjacent to the mines. These communities hold the mines' social licence to operate and often do not feel they are receiving a fair share of the pie. Beyond traditional socio-economic development (SED) spend, Gold Fields is actively promoting employment and procurement from host communities. This is starting to have a positive impact on our host communities (p110)

Despite all of its perceived shortcomings, there can be no doubt that – if executed responsibly – mining can be a significant force for sustainable growth. However, this potential is currently not being realised, as the key stakeholders have failed to find common ground with each other and investors have fled, denying the industry the capital it needs to fund sustainable growth.

Gold Fields is actively engaging with its host governments in Ghana, Peru and South Africa in addressing the resource nationalism that, we believe, prevents the industry from achieving sustainable growth and broad-based value distribution.

## 2.5 Risk and materiality

Gold Fields uses a set of four well-defined processes to assess its risks, opportunities and material issues:

1. Key risks – and mitigating actions – are identified using an Enterprise-wide Risk Management (ERM) process
2. The Group takes into account the views and concerns of a wide group of stakeholders through direct and indirect stakeholder engagement processes
3. As part of the integrated reporting process, the Group conducts comprehensive interviews with key management, collects operational, financial and sustainability data, and analyses the short-, medium- and long-term strategic trends affecting the business
4. Material sustainability issues are assessed and prioritised according to the GRI G4 Guidelines, and comprehensive internal and external stakeholder interviews conducted to determine the relative ranking of material issues

The outputs from these four processes have informed the identification of the risks, opportunities and material issues contained in this Integrated Annual Report (IAR). Key elements of the four processes are set out alongside.

### Internal assessment: Enterprise-wide Risk Management (ERM)

Gold Fields' mature ERM process is aligned with the ISO 31000 international risk management standard, as well as the risk management requirements of South Africa's King III Code.

The ERM process – which prioritises risks on the basis of probability and severity – is based on the following process:

1. Workplace risk assessments: Managers carry out ongoing workplace risk assessments in accordance with international standards (for example, ISO 31000 and the SAMREC guideline)
2. Mine/region reviews: Each regional and mine ExCo conducts a review of the top risks and mitigating strategies on a quarterly basis
3. Presentation to the Group ExCo: Each mine manager presents the top 10 risks and mitigation actions to ExCo during quarterly business reviews – and mitigating actions are assessed for relevance and effectiveness
4. Compilation of Group Risk Register: The Group Risk Manager extracts the top risks from the regional and operational registers in line with the tolerance levels set by the Board, and compiles the Group Risk Register
5. Assessment and moderation: The risks are assessed and moderated at a Group-level by relevant risk owners and ExCo members
6. ExCo risk meeting: Every six months, ExCo reviews the top risks and sets and monitors Group-wide mitigation strategies
7. Audit Committee review: The Audit Committee reviews the top risks and mitigation strategies twice a year. This work will move to the reconstituted Risk Committee during 2016 (AFR – p2).

8. Internal audit review: The internal audit function assesses progress against – and adherence to – mitigation strategies on a regular basis

The Group heat maps on pages 46 – 49 set out:

- ▶ The Group's top 10 risks as well as top five risks per region, as identified through the ERM process (i.e. the Group's top operational and strategic risks at the end of 2015)
- ▶ Key movements in the top 10 Group risks between 2014 and 2015
- ▶ Key mitigating strategies to avoid and/or mitigate the top 10 Group risks for 2015, and the top five risks per region

### External assessment: Stakeholder engagement

Proactive and frank stakeholder engagement plays a vital role in helping Gold Fields identify its material issues. All stakeholder engagement activities are informed by the AA 1000 principles of:

- ▶ Inclusivity
- ▶ Materiality
- ▶ Responsiveness

Gold Fields' engagement activities fall into two categories:

- ▶ **Direct engagement**, including organised dialogues, roundtable discussions, one-to-one meetings, internal surveys and regular engagement with local communities and other stakeholders at each operation and project

- › **Indirect engagement**, including the use of external benchmarks and standards (such as the UN Global Compact) that are designed to reflect and address societal expectations

### *Operational engagement*

At an operational-level, all mines identify, prioritise and directly engage stakeholder groups that have the potential to affect their operational, sustainability or financial performance.

This includes, for example, ongoing engagement of:

- › Employees and their representatives by our human resources teams and general managers
- › Local communities by our community relations teams and general managers
- › Regulators by our discipline heads and general managers
- › Key contractors and suppliers by our procurement teams, health and safety managers and operational personnel

### *Strategic engagement*

At a strategic-level, Gold Fields' corporate and regional management teams implement an ongoing programme of direct and indirect engagement. This includes ongoing engagement of:

- › In-country peer companies by the regional Executive Vice-Presidents (EVPs)
- › Central, regional and local governments by the Group's corporate affairs teams and legal teams, as well as members of the Group ExCo and regional EVPs

- › Shareholders and potential investors by the Group investor relations team, CEO, CFO and regional EVPs
- › Materiality assessment process (p45)

The outcomes of stakeholder engagement are integrated into Gold Fields' internal reporting processes – including its quarterly regional board reports, sustainable development reports and other documents. In addition, they inform Gold Fields' ERM process, and external reporting processes.

### **Integrated reporting process**

The outputs of the ERM and stakeholder engagement processes are analysed alongside the information collected for the IAR. This includes:

- › Gold Fields' operational, financial and sustainability data generated through our data management systems
- › The output of dedicated integrated reporting interviews with managers and executives at operation-, region- and Group-level
- › Short-, medium- and long-term strategic analysis of the external environment

This is with the aim of:

- › Gaining greater insight into the Group's material issues
- › Identifying and assessing the management actions taken in response to each material issue – as well as the effectiveness of such actions
- › Defining the content of this IAR

The IAR is prepared on the basis of this process and is subject to a rigorous internal assurance process. The Board – through the Audit Committee – is ultimately responsible for the contents of this IAR.

### **Materiality assessment**

Gold Fields has carried out a formal process to assess and prioritise its material sustainability issues. It has done so using criteria aligned with those set out in the GRI G4 Guidelines taking into account the actual or potential impact of these issues on Gold Fields and its stakeholders.

### *Materiality process*

Gold Fields' GRI G4 materiality process is based on a series of iterative assessments using a common, quantitative scoring framework. It draws on a range of internal and external sources, as outlined below:

#### **1. National and international legislation and regulation**

#### **2. Standards**

##### **Internal:**

Gold Fields' Vision and Values; Sustainable Development Framework; Stakeholder Charters; and Code of Ethics

##### **External:**

10 Principles of the UN Global Compact; UN Guiding Principles on Business and Human Rights; ICMM 10 Principles on Sustainable Development; and ISO 14001 (environment) and OHSAS 180001 (safety) management standards

## 2.5 Risk and materiality (continued)

### 3. Documentation

**Internal:**

Gold Fields Board reports; Safety, Health and Sustainable Development reporting; and ERM output documents

**External:**

Media reports; NGO commentary; and sector analysis

### 4. Engagement

**Internal:**

Engagement around the specific requirements of the GRI with senior management

**External:**

Engagement with external stakeholders

Each step of the G4 materiality process is outlined below with the outcome shown in the table on the following page.

These steps involve detailed engagement to determine the ranking of Gold Fields' material sustainability issues. Senior executives at the Company, including its regional operations, and representatives of external stakeholders - including industry, government, community and environmental organisations - were briefed on the GRI process and asked to evaluate all G4 aspects in terms of importance to Gold Fields and its stakeholders. This took the form of a ranking with 1 being the most critical to Gold Fields and its stakeholders, and 10 considered not material at all.

Once these rankings had been made they were averaged and a score reached for each aspect. A score between 1 and 5 means that these issues are material to Gold Fields. Scores between 5 and 10 suggest that internal and external stakeholders consider these issues of less material importance to Gold Fields and its stakeholders. However, this does not mean that they will not be addressed by our management team when the issues arise.

The outcome – depicted in the table alongside – ranks health and safety, water management, social licence to operate and management of environmental issues as the key GRI aspects that internal and external stakeholders consider most material to Gold Fields and its wider stakeholder base.



> Winder house at South Deep



**Flow from operating environment to risks, materiality and strategy**

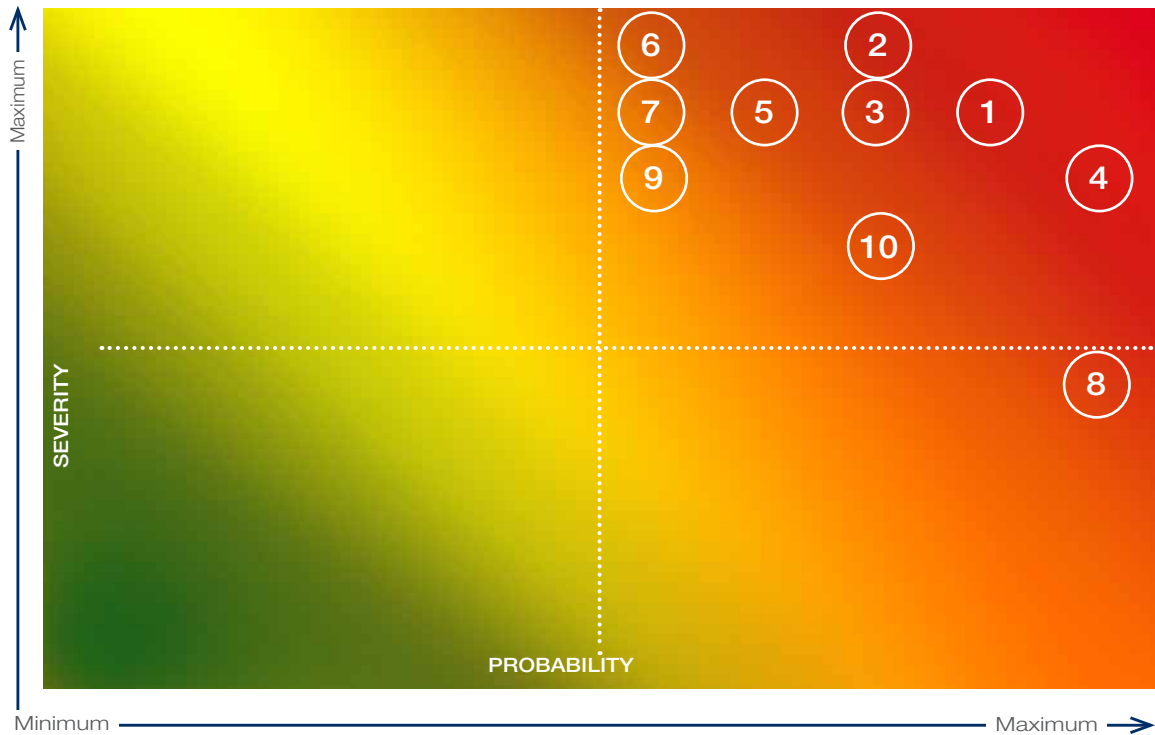
**Prioritised materiality issues**

Initial research and engagement	<b>STEP 1</b>	<ul style="list-style-type: none"> <li>➤ Review of current sustainability issues facing the gold mining sector and Gold Fields footprint countries</li> <li>➤ Preliminary engagement with internal discipline experts</li> <li>➤ Review of ERM system outputs</li> </ul>																																																
Development of initial results	<b>STEP 2</b>	<ul style="list-style-type: none"> <li>➤ Prioritisation of all GRI G4 aspects – in line with the G4 materiality assessment criteria</li> </ul>																																																
Integration of feedback	<b>STEP 3</b>	<ul style="list-style-type: none"> <li>➤ Presentation of initial results to key internal stakeholders</li> <li>➤ Presentation of initial results to key external stakeholders</li> <li>➤ Collation and adjustment of results</li> </ul>																																																
Development of the final materiality results	<b>STEP 4</b>	<ul style="list-style-type: none"> <li>➤ The setting of 'boundaries of impact' for each GRI G4 aspect</li> <li>➤ Categorisation and consolidation of GRI G4 aspects into higher-level, Gold Fields-specific 'issues'</li> <li>➤ Sign-off of the final assessment results by ExCo</li> </ul>																																																
		Prioritised material issues																																																
		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Cluster</th> <th style="text-align: right;">Score</th> </tr> </thead> <tbody> <tr><td>Health and safety</td><td style="text-align: right;">2.3</td></tr> <tr><td>Water management</td><td style="text-align: right;">2.7</td></tr> <tr><td>Social licence to operate</td><td style="text-align: right;">2.9</td></tr> <tr><td>Managing environmental issues across the lifecycle</td><td style="text-align: right;">3.2</td></tr> <tr><td>Workforce</td><td style="text-align: right;">3.5</td></tr> <tr><td>Compliance</td><td style="text-align: right;">3.5</td></tr> <tr><td>Government relations</td><td style="text-align: right;">3.7</td></tr> <tr><td>Community value distribution</td><td style="text-align: right;">3.8</td></tr> <tr><td>Total value distribution</td><td style="text-align: right;">3.8</td></tr> <tr><td>Employee development</td><td style="text-align: right;">4.0</td></tr> <tr><td>Industrial relations</td><td style="text-align: right;">4.4</td></tr> <tr><td>Human rights</td><td style="text-align: right;">4.5</td></tr> <tr><td>Energy and carbon management</td><td style="text-align: right;">4.6</td></tr> <tr><td>General grievance mechanisms</td><td style="text-align: right;">4.7</td></tr> <tr><td>Equal remuneration</td><td style="text-align: right;">5.0</td></tr> <tr><td>Human rights due diligence on investments</td><td style="text-align: right;">5.1</td></tr> <tr><td>Supply chain management</td><td style="text-align: right;">5.6</td></tr> <tr><td>Resettlement</td><td style="text-align: right;">5.7</td></tr> <tr><td>Biodiversity</td><td style="text-align: right;">5.8</td></tr> <tr><td>Child/forced labour and freedom of association</td><td style="text-align: right;">6.5</td></tr> <tr><td>Materials</td><td style="text-align: right;">6.5</td></tr> <tr><td>Market regulation</td><td style="text-align: right;">7.0</td></tr> <tr><td>Product impacts</td><td style="text-align: right;">8.0</td></tr> </tbody> </table>	Cluster	Score	Health and safety	2.3	Water management	2.7	Social licence to operate	2.9	Managing environmental issues across the lifecycle	3.2	Workforce	3.5	Compliance	3.5	Government relations	3.7	Community value distribution	3.8	Total value distribution	3.8	Employee development	4.0	Industrial relations	4.4	Human rights	4.5	Energy and carbon management	4.6	General grievance mechanisms	4.7	Equal remuneration	5.0	Human rights due diligence on investments	5.1	Supply chain management	5.6	Resettlement	5.7	Biodiversity	5.8	Child/forced labour and freedom of association	6.5	Materials	6.5	Market regulation	7.0	Product impacts	8.0
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## 2.5 Risk and materiality (continued)

### Group and regional risk tables

#### Gold Fields – Top 10 risks



#### Top 10 risks in 2015 – Mitigating strategies

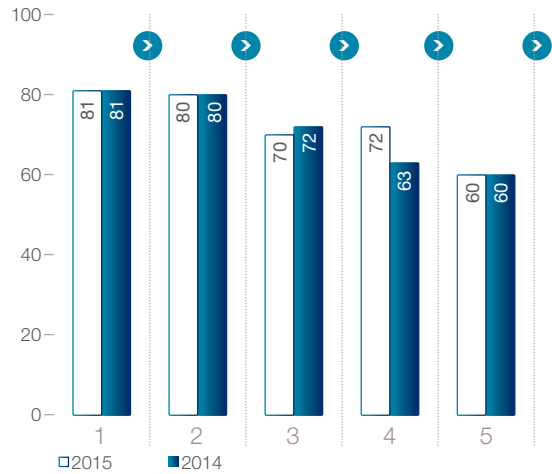
2015 RISK	1 2014: 1	2 2014: 2	3 2014: 4	4 2014: 3	5 2014: 6
DESCRIPTION	South Deep – Failure to deliver the operational plan and loss of investor confidence	Lower price and currency volatility	Replacing Mineral Resources and Reserves at international operations	Failure to achieve annual operational production and free cash flow plans	Regulatory uncertainty in South Africa and Ghana
MITIGATING STRATEGIES	<ul style="list-style-type: none"> <li>Core focus on getting the basics right continues to be implemented during the year</li> <li>Working towards cash breakeven by the end of 2016</li> <li>Fit-for-purpose organisational design and new management team appointed with strong mechanised mining experience</li> <li>Introduction and implementation of a new regional pillar design and mining method (high-profile de-stress mining)</li> </ul>	<ul style="list-style-type: none"> <li>Updated metal prices used for 2016 and 2017 mine planning</li> <li>Ongoing portfolio optimisation to ensure cash-generation</li> <li>Business structured to generate sustainable free cash flow at a lower gold price</li> <li>Business Process Re-engineering and continuous focus on cost control and cash generation</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive near-mine exploration programmes in place</li> <li>M&amp;A strategy to identify opportunities</li> <li>Salares Norte, 2016 budget approved for further drilling</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive business planning cycle implemented in 2015 to improve accuracy and delivery of plans</li> <li>Operational risk assessments conducted – mitigations in place to reduce impact of potential interruptions</li> </ul>	<ul style="list-style-type: none"> <li>Supporting the Chamber of Mines in its negotiations and legal proceedings regarding BEE ownership to ensure the security of mining licences (AFR – p41)</li> <li>Lobbying through the Chamber to influence the development of the MPRDA Amendment Act</li> <li>Continued compliance by South Deep with the provisions of the Mining Charter and Social and Labour Plans</li> <li>Ongoing engagement and lobbying with the Ghana Government to finalise the Investment Agreement</li> </ul>
RISK RANKING					

## 2014 Risks – How we performed in 2015

### 2014 RISK RATING

1	South Deep – failure to deliver the business plan	Despite the significant financial and operational performance improvement at South Deep during 2015, this remains the Group's top risk
2	Lower gold price and volatility	The continued decline in both gold and copper prices during 2015 ensured that this remains a high risk
3	Replacement of Reserves and Resources at international ops	Since four out of seven international operations reported lower Reserves (after depletion) in 2015 this is now a higher risk
4	Non-achievement of 15% FCF margin at US\$1,300/oz	Despite the better operational and cost performance in 2015 this risk remains at a high level amid the lower gold price
5	Loss of social licence to operate	Social and economic pressures from communities remain a pressing issue at our South African, Peruvian and Ghanaian mines

### How we performed<sup>1</sup>



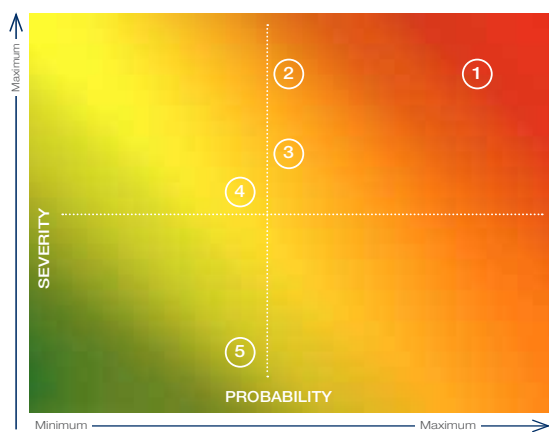
<sup>1</sup> The risk rating in this graph is based on our severity and probability matrix. Both are rated from one to 10 and the result is a product of the two ratings for each risk.

6 2014: 5	7 2014: 14	8 2014: 9	9 2014: 11	10 2014: 7
<b>Loss of social licence to operate</b>	<b>Level of debt and debt service costs</b>	<b>Labour relations at South Deep</b>	<b>Water discharges/pollution and supply</b>	<b>Security of power supply and cost of energy</b>
<ul style="list-style-type: none"> <li>Ongoing focus on growth opportunities in lower risk mining destinations</li> <li>Fit-for-purpose community relations structures in operations and regions</li> <li>Group review of community relations strategies, plans, progress and structures</li> <li>Implementation of community investment and Shared Value projects in Ghana, Peru and South Africa</li> </ul>	<ul style="list-style-type: none"> <li>Strong focus on paying down debt through cash generation from operations</li> <li>Targeting a net debt/ EBITDA ratio of 1.0</li> <li>Restructuring of existing debt</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced and ongoing engagement strategies in place</li> <li>Robust performance management processes being applied</li> <li>Implementation of improved communication structures and channels</li> </ul>	<ul style="list-style-type: none"> <li>Strict and focused compliance with environmental management requirements in all regions</li> <li>All operations are ISO 14001 certified</li> <li>Independent environmental and legal due diligence carried out to assess Group-wide tailings storage facilities</li> <li>Integrated post-closure water management plans to be in place for all regions</li> </ul>	<ul style="list-style-type: none"> <li>Five-year energy and carbon plans built into operational plans for implementation</li> <li>Continued investigation into the feasibility of renewable energy options</li> <li>Agreement with Genser Energy for the supply of power in Ghana being implemented and monitored</li> <li>Load curtailment arrangements at South Deep implemented</li> <li>South Deep 40MW solar photovoltaic (PV) project in RFP phase</li> </ul>

## 2.5 Risk and materiality (continued)

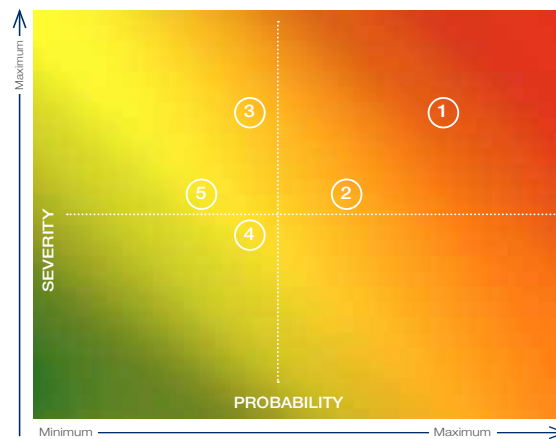
### Group and regional risk tables

#### Top 5 risks in 2015 – Americas region



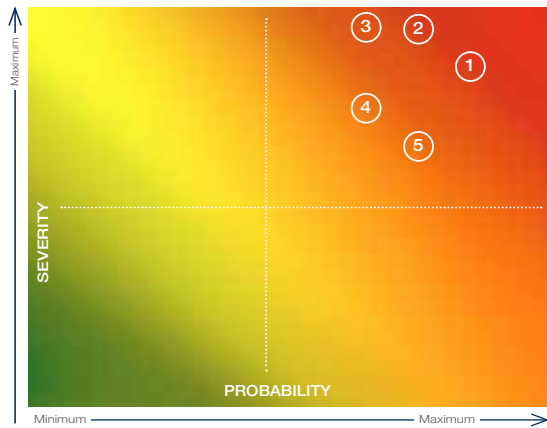
RISK	DESCRIPTION WITH MITIGATING STRATEGIES
1	<p><b>Erosion of free cash flow, sustained low copper and gold prices and cost inflation</b></p> <ul style="list-style-type: none"> <li>Enhanced business planning process and continued delivery of the operational plan</li> <li>Improved understanding of operational risks and implementation of effective mitigation</li> <li>Continued focus on cost control and reduction measures</li> </ul>
2	<p><b>Social pressures, conflicts and community expectations</b></p> <ul style="list-style-type: none"> <li>Social pressures around Las Tomas spring relocation, despite regulatory approval</li> <li>Pro-active community and stakeholder engagement</li> <li>Properly planned contingencies in place for conflict</li> <li>Stringent follow-up and feedback on all community commitments</li> <li>Implement contingency plan for a potential social conflict</li> </ul>
3	<p><b>Increase in regulatory scrutiny, sanctioning process and inspections</b></p> <ul style="list-style-type: none"> <li>Process in place to challenge sanctions and penalties</li> <li>Strict compliance with regulations through internal auditing and constant monitoring</li> </ul>
4	<p><b>Government/political instability</b></p> <ul style="list-style-type: none"> <li>Continued dialogue and engagement with authorities.</li> <li>Active participation in Peru's National Chamber of Mining, Oil and Energy and local Chamber of Commerce</li> </ul>
5	<p><b>Houses in very serious conditions</b></p> <ul style="list-style-type: none"> <li>Voluntary programme to repair houses in Hualgayoc at high risk of collapse</li> </ul>

#### Top 5 risks in 2015 – Australia region



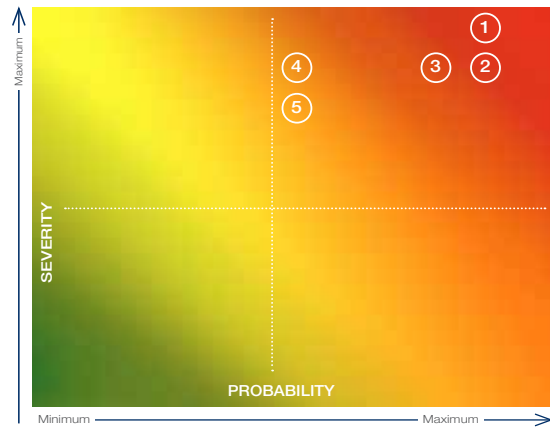
RISK	DESCRIPTION WITH MITIGATING STRATEGIES
1	<p><b>Reserve life at all operations</b></p> <ul style="list-style-type: none"> <li>Near-mine exploration spend increased to A\$86 million to delineate further reserves budgeted in 2016</li> <li>Ongoing business improvement to achieve cost savings, improve operating margins and improve the Resource cut-off grade</li> <li>M&amp;A strategy – opportunities being considered</li> </ul>
2	<p><b>Failure to achieve delivery against operational plans</b></p> <ul style="list-style-type: none"> <li>Ongoing improvements to mine plan accuracy and operational delivery</li> <li>Operational risk assessments conducted to reduce potential business interruptions</li> <li>Weekly, monthly and quarterly monitoring of performance</li> </ul>
3	<p><b>Australian gold price</b></p> <ul style="list-style-type: none"> <li>Ongoing monitoring and review of compliance to annual operational plans on all sites</li> <li>Monitor relationship between Australian Dollar and US gold price</li> <li>Development and implementation of margin improvement programmes</li> </ul>
4	<p><b>Native title at Kambalda</b></p> <ul style="list-style-type: none"> <li>Appeal heard on 25 May 2015 – judgment reserved</li> <li>Strategy in response to adverse decision, including further appeal process if required.</li> </ul>
5	<p><b>Ongoing safety performance</b></p> <ul style="list-style-type: none"> <li>Vital behaviours programme rolled out and producing good results</li> <li>Active Visible Felt Leadership training for all managers</li> <li>Review undertaken to consolidate safety initiatives for 2016</li> </ul>

### Top 5 risks in 2015 – South African region



RISK	DESCRIPTION WITH MITIGATING STRATEGIES
1	<p><b>Failure to achieve the South Deep operational plan and loss of investor confidence</b></p> <ul style="list-style-type: none"> <li>Align planning process with realistic productivities</li> <li>Core focus on getting the basics right continues to be implemented</li> <li>Identification of 68 business improvement projects - implementation commenced</li> <li>Improve production output by acquiring additional and appropriate staff and fleet resources</li> </ul>
2	<p><b>Geotechnical risk:</b></p> <ul style="list-style-type: none"> <li>Changes in mining method</li> <li>Seismicity</li> <li>Secondary support and backfill</li> </ul> <ul style="list-style-type: none"> <li>Implemented Geotechnical Review Board recommendations, including revised support strategies, mining sequence, pillar configuration changes and improved modelling capabilities</li> <li>Introduction of high profile de-stress stoping</li> <li>Full plant tailings commissioned and utilised to reduce backfill backlog</li> <li>Initiated analysis of secondary support requirements</li> </ul>
3	<p><b>Union and labour relations</b></p> <ul style="list-style-type: none"> <li>Extensive union engagement and union re-basing strategy</li> <li>Wage negotiations successfully concluded outside the Chamber of Mines central bargaining unit</li> <li>New engagement structures and higher frequency of engagement</li> </ul>
4	<p><b>Leadership capabilities</b></p> <ul style="list-style-type: none"> <li>Retention of individuals in leadership positions</li> <li>Skills deficit addressed through the appointment of 146 people in core disciplines in 2015</li> </ul>
5	<p><b>Loss of social licence to operate and community activism</b></p> <ul style="list-style-type: none"> <li>Meet Mining Charter and Social and Labour Plan commitments</li> <li>Fit-for-purpose community relations and stakeholder engagement structure in place</li> <li>Five-year community relations strategy prepared for implementation in 2016</li> <li>Implementation of two Shared Value projects focused on Mathematics and Science education and local community procurement</li> <li>Alliance with Sibanye Gold to continue into 2016</li> <li>Collaboration with South Deep Community Trusts in their strategy formulation and implementation</li> <li>Implementing a water management plan at South Deep</li> <li>Develop stakeholder engagement plan and strategy for the nearby community of Thusanang</li> </ul>

### Top 5 risks in 2015 – West African region



RISK	DESCRIPTION WITH MITIGATING STRATEGIES
1	<p><b>Tightened fiscal policies by government</b></p> <ul style="list-style-type: none"> <li>Investment Agreement negotiation and implementation</li> <li>Frequent engagement with government and lobbying via the Chamber of Mines</li> <li>Strict adherence to Bank of Ghana foreign exchange regulations to ensure compliance</li> </ul>
2	<p><b>Lower gold price, currency fluctuations and increased input costs</b></p> <ul style="list-style-type: none"> <li>Ongoing implementation of business process re-engineering initiatives</li> <li>Evaluate future options for Damang – decision in mid-2016</li> <li>Cost containment</li> <li>Fit-for-purpose structure in place with regular reviews</li> <li>Renegotiate strategic supplier contracts</li> </ul>
3	<p><b>Erratic power supply and load shedding</b></p> <ul style="list-style-type: none"> <li>Independent Power Purchase Agreement with Genser Energy</li> <li>Damang and Tarkwa power plants to be commissioned in 2016</li> <li>Ongoing consultations/engagement with national electricity authorities</li> <li>Increase generation capabilities from back-up generators</li> </ul>
4	<p><b>Loss of environmental and social licence to operate</b></p> <ul style="list-style-type: none"> <li>Consideration of regulatory requirements during planning processes</li> <li>Frequent engagement with the Environmental Protection Agency (EPA)</li> <li>Community awareness campaigns.</li> <li>In-depth preparation for EPA's annual Akoben environmental audits</li> </ul>
5	<p><b>Increased stakeholder expectations</b></p> <ul style="list-style-type: none"> <li>Working with employees to improve productivity as a trade-off for real wage rises</li> <li>Stakeholder engagement</li> <li>Shared Value rollout</li> <li>Continued community investment programmes</li> </ul>

### Focus areas in the 2015 Group performance scorecard

Financial	p51 – 58
Business optimisation	p59 – 88
Social licence to operate	p89 – 120
People	p121 – 136



> Storage facility at Cerro Corona

# 3

## Financial focus

3.1	Introduction	p52
3.2	Strategic focus areas	p57
	› Free cash flow	p57
	› Reducing debt	p57
	› Dividends	p57
	› Improving investor confidence	p57
	› Share price performance	p58



## 3.1 Financial focus – Introduction

Gold Fields' financial strategy has a singular focus – growing the margin and free cash flow (FCF) for every ounce of gold produced. This has long replaced the traditional focus on growth in production and reserve ounces and is aimed at turning the Group into a focused, lean and globally diversified gold mining company that generates significant FCF and provides investors with superior leverage to the price of gold, even when gold is trading at its current low levels.

Our priorities for the cash we generate include:

1. Rewarding our shareholders with dividends  
*Our policy is to pay out between 25% and 35% of our normalised earnings as dividends*

2. Improving our balance sheet by paying down debt  
*Our target is to further and consistently reduce our net debt and net debt to Earnings before interest, taxes, depreciation and amortisation (EBITDA) ratio*
3. Pursuing accretive acquisitions  
*Our preference is for the acquisition of in-production ounces that will contribute positively to EBITDA and cash flow from the outset*

Our strategy is embodied in our overarching objective of generating at least a 15% FCF margin at a notional long-term planning gold price of US\$1,300/oz, which translates to an All-in Cost (AIC) breakeven level of approximately US\$1,050/oz. The Group's FCF margin for 2015 was 8% despite the

fact that, at US\$1,140/oz the actual annualised gold price received was 12% below the US\$1,300/oz long-term planning price. If the price received for the year was normalised to US\$1,300/oz, then the free cash flow margin would have been 15% – in line with our stated guideline. Details of the Group's production and cost performance are contained in the Operational Performance Overview (p61 – 67).

### 2015 financial performance

During 2015, the ongoing impact of Gold Fields' transformation process was reflected in its positive financial performance, which enabled the Group to improve its cash reserves, balance sheet and debt position and to continue to reward shareholders with dividends, despite the lower gold prices.

The financial highlights for Gold Fields during 2015 were:

	2015	2014	2013
Average US\$ gold price received	<b>US\$1,140/oz</b>	US\$1,249/oz	US\$1,386/oz
Average A\$ gold price received	<b>A\$1,541/oz</b>	A\$1,404/oz	A\$1,446
Average Rand gold price received	<b>R478,263/kg</b>	R441,981/kg	R434,915/kg
Revenue	<b>US\$2,545 million</b>	US\$2,869 million	US\$2,906 million
AIC	<b>US\$1,026/oz</b>	US\$1,087/oz	US\$1,312/oz
AIC excluding South Deep	<b>US\$944/oz</b>	US\$1,020/oz	US\$1,040/oz
Net operating costs	<b>US\$1,456 million</b>	US\$1,678 million	US\$1,667 million
Capital expenditure	<b>US\$634 million</b>	US\$609 million	US\$739 million
Net cash flow <sup>1</sup>	<b>US\$123 million</b>	US\$235 million	(US\$235 million)
Free cash flow margin	<b>8%</b>	13%	n/a
Net debt	<b>US\$1,380 million</b>	US\$1,453 million	US\$1,735 million
Net debt/ EBITDA ratio	<b>1.38</b>	1.30	1.50
Normalised earnings	<b>US\$45 million</b>	US\$85 million	US\$58 million
Total dividend payment	<b>R0.25/share</b>	R0.40/share	R0.22/share
Dividend as % of normalised earnings	<b>34%</b>	34%	30%

<sup>1</sup> Net cash flow from operating activities less net capital expenditure and environmental payments



During 2015, net revenue decreased by 11% from US\$2,869 million in 2014 to US\$2,545 million, as a result of lower production and the 9% drop in the average gold price received. Net operating costs declined by 13% to US\$1,456 million as a result of the 17% weakening in the Rand/US Dollar and Australian/US Dollar exchange rates, the lower oil price and good cost control. (p62)

The Group All-in Sustaining Costs (AISC) of US\$1,007/oz and total AIC of US\$1,026/oz in 2015 compared with US\$1,053/oz and US\$1,087/oz in 2014. These lower costs were due to lower net operating costs, the weaker average Rand/US Dollar and Australian/US Dollar exchanges, partially offset by lower by-product credits and higher capital expenditure. Operating profits fell from US\$1,191 million in 2014 to US\$1,089 million in 2015.

Other salient features during 2015 included:

- ▶ Asset impairments and write-offs of US\$213 million including impairments at Darlot (US\$14 million), Damang (US\$36 million), scrapping of assets no longer in use at Cerro Corona (US\$8 million) and the Arctic Platinum project in Finland (US\$39 million) as well as impairments to the Group's

investment in the Far Southeast project in the Philippines (US\$101 million) and Hummingbird Resources (US\$15 million)

- ▶ Royalty payments of US\$76 million in 2015 compared with US\$86 million in 2014
- ▶ A rise in capital expenditure from US\$609 million in 2014 to US\$634 million in 2015
- ▶ An increase in the taxation charge to US\$247 million (2014: US\$118 million), mainly due to impairments of deferred tax assets of US\$68 million at Cerro Corona and US\$37 million at Damang, along with a US\$32 million charge related to the weakening of the Peruvian Nuevo Sol

As a result of the above, net losses attributable to the Gold Fields shareholders amounted to US\$242 million in 2015 compared with net earnings of US\$13 million in 2014 leading to a headline loss of US\$28 million in 2015 compared with earnings of US\$27 million in 2014. Normalised earnings fell from US\$85 million in 2014 to US\$45 million in 2015.

### Impact of weaker currencies

In Australia and South Africa, Gold Fields receives its gold revenue in foreign currency terms. As a result of a significant weakening in the Australian Dollar and the South

African Rand during 2015 this offered the operations in these countries a measure of protection against the weaker US Dollar gold price when converting their revenues to local currency. The impact has been computed as follows:

- ▶ **Australia:** During 2015 the Australian Dollar weakened by 17% against the US Dollar and the average gold price received by our Australian mines therefore rose from A\$1,404/oz in 2014 to A\$1,541/oz in 2015. Taking into account the 43,000 ounces drop in production in the region last year, this had the impact of boosting revenue by A\$75 million.
- ▶ **South Africa:** The South African Rand weakened by 17% against the US Dollar during 2015 and the average Rand gold price received strengthened from R441,981/kg in 2014 to R478,263/kg in 2015 as a result. South Deep's revenues in 2015 benefited by around R190 million, taking into account the marginal drop in production. During Q4 2015, the average Rand gold price received averaged just over R500,000/kg, assisting South Deep to operate cash positively for the first time in November and December.

A weaker local currency means that imported costs rise at the same time, which can push up the costs of the heavy equipment, machinery and other components that we mostly import at our South African and Ghanaian operations.

### Gold price in various currencies

(Index: 1 Jan 2015 = 100)



A detailed analysis of our financial performance is provided in the Management's Discussion and Analysis of the Financial Statements in the 2015 Annual Financial Report (p6 – 33).

The Consolidated Income Statement, Statement of Financial Position and Cash Flow Statement – extracted from the Annual Financial Report 2015 – are provided on the pages that follow.

### 3.1 Financial focus – Introduction (continued)

#### Consolidated income statement

for the year ended 31 December 2015

*Figures in millions unless otherwise stated*

UNITED STATES DOLLAR

	2015	2014
Revenue	2 545,4	2 868,8
Cost of sales	(2 066,1)	(2 334,4)
<b>Net operating profit</b>	<b>479,3</b>	534,4
Investment income	6,3	4,2
Finance expense	(82,9)	(99,2)
Loss on financial instruments	(4,7)	(11,5)
Foreign exchange gains	9,5	8,4
Other costs	(21,2)	(62,5)
Share-based payments	(10,9)	(26,0)
Long-term incentive plan	(5,3)	(8,7)
Exploration expense	(53,5)	(47,2)
Share of results of equity accounted investees after taxation	(5,7)	(2,4)
Restructuring costs	(9,3)	(42,0)
Impairment of investments and assets	(221,1)	(26,7)
Profit on disposal of investments	0,1	0,5
Profit on disposal of Chucapaca	–	4,6
Loss on disposal of property, plant and equipment	(0,1)	(1,3)
<b>Profit before royalties and taxation</b>	<b>80,5</b>	224,6
Royalties	(76,0)	(86,1)
<b>Profit before taxation</b>	<b>4,5</b>	138,5
Mining and income taxation	(247,1)	(118,1)
<b>(Loss)/profit for the year</b>	<b>(242,6)</b>	20,4
<b>(Loss)/profit attributable to:</b>		
– Owners of the parent	(242,1)	12,8
– Non-controlling interest holders	(0,5)	7,6
	<b>(242,6)</b>	20,4
<b>(Loss)/earnings per share attributable to ordinary shareholders of the Company:</b>		
Basic (loss)/earnings per share – cents	(31)	2
Diluted basic (loss)/earnings per share – cents	(31)	2

**Consolidated statement of financial position**

at 31 December 2015

*Figures in millions unless otherwise stated*

UNITED STATES DOLLAR

	2015	2014
<b>ASSETS</b>		
<b>Non-current assets</b>	<b>4 969,6</b>	5 764,9
Property, plant and equipment	<b>4 312,4</b>	4 895,7
Goodwill	<b>295,3</b>	385,7
Inventories	<b>132,8</b>	132,8
Equity accounted investees	<b>129,1</b>	252,4
Investments	<b>10,9</b>	5,5
Environmental trust funds	<b>35,0</b>	30,4
Deferred taxation	<b>54,1</b>	62,4
<b>Current assets</b>	<b>908,1</b>	1 092,8
Inventories	<b>298,2</b>	368,3
Trade and other receivables	<b>168,9</b>	226,5
Cash and cash equivalents	<b>440,0</b>	458,0
Assets held for sale	<b>1,0</b>	40,0
<b>Total assets</b>	<b>5 877,7</b>	6 857,7
<b>EQUITY AND LIABILITIES</b>		
Equity attributable to owners of the parent	<b>2 656,1</b>	3 538,8
Share capital	<b>58,1</b>	57,9
Share premium	<b>3 412,9</b>	3 412,9
Other reserves	<b>(2 262,2)</b>	(1 636,5)
Retained earnings	<b>1 447,3</b>	1 704,5
Non-controlling interest	<b>111,9</b>	124,5
<b>Total equity</b>	<b>2 768,0</b>	3 663,3
<b>Non-current liabilities</b>	<b>2 545,6</b>	2 481,3
Deferred taxation	<b>487,3</b>	387,0
Borrowings	<b>1 761,6</b>	1 765,7
Provisions	<b>284,1</b>	320,3
Long-term incentive plan	<b>12,6</b>	8,3
<b>Current liabilities</b>	<b>564,1</b>	713,1
Trade and other payables	<b>427,6</b>	509,7
Taxation and royalties	<b>77,8</b>	58,2
Current portion of borrowings	<b>58,7</b>	145,2
<b>Total equity and liabilities</b>	<b>5 877,7</b>	6 857,7

### 3.1 Financial focus – Introduction (continued)

#### Consolidated statement of cash flows

for the year ended 31 December 2015

Figures in millions unless otherwise stated

UNITED STATES DOLLAR

	2015	2014
<b>Cash flows from operating activities</b>	<b>743,9</b>	808,5
Cash generated by operations	<b>1 005,4</b>	1 061,3
Interest received	<b>5,9</b>	3,6
Dividends received	<b>–</b>	0,1
Change in working capital	<b>43,6</b>	83,7
Cash generated by operating activities	<b>1 054,9</b>	1 148,7
Interest paid	<b>(86,8)</b>	(103,8)
Royalties paid	<b>(76,9)</b>	(88,8)
Taxation paid	<b>(118,4)</b>	(105,3)
Net cash from operations	<b>772,8</b>	850,8
Dividends paid	<b>(28,9)</b>	(42,3)
– Ordinary shareholders	<b>(15,1)</b>	(29,8)
– Non-controlling interests holders	<b>(12,1)</b>	(10,6)
– South Deep BEE dividend	<b>(1,7)</b>	(1,9)
<b>Cash flows from investing activities</b>	<b>(651,5)</b>	(530,9)
Additions to property, plant and equipment	<b>(634,1)</b>	(608,9)
Proceeds on disposal of property, plant and equipment	<b>3,1</b>	4,9
Proceeds on disposal of Chucapaca	<b>–</b>	81,0
Purchase of investments	<b>(3,0)</b>	(4,4)
Proceeds on disposal of investments	<b>–</b>	6,4
Environmental trust funds and rehabilitation payments	<b>(17,5)</b>	(9,9)
<b>Cash flows from financing activities</b>	<b>(88,3)</b>	(125,9)
Equity contributions from non-controlling interest holders	<b>–</b>	2,0
Loans raised	<b>506,0</b>	463,9
Loans repaid	<b>(594,3)</b>	(591,8)
Net cash generated	<b>4,1</b>	151,7
Effect of exchange rate fluctuation on cash held	<b>(22,1)</b>	(18,7)
Cash and cash equivalents at beginning of the year	<b>458,0</b>	325,0
<b>Cash and cash equivalents at end of the year</b>	<b>440,0</b>	458,0

## 3.2 Financial focus – Strategic focus areas

### Free cash flow

During 2015, Gold Fields generated a US\$123 million net cash flow compared to US\$235 million in 2014. This was achieved despite the fact that the gold price for 2015, at US\$1,140/oz, was 9% lower than the US\$1,249/oz realised in 2014. Gold Fields has generated positive net cash flow in all but one of the past 10 quarters. A free cash flow (FCF) margin of 8% was achieved compared with 13% in 2014. This is a good achievement in view of the lower gold price received. Indeed, if the price received is normalised to our long-term planning price of US\$1,300/oz the FCF margin would have been 15%.

In fact, to put our net cash flow generation in context, during 2015 our international mines in Australia, Ghana and Peru collectively generated US\$334 million of net cash flow. Of that US\$80 million was re-invested into our developing South Deep mine in South Africa, which is not yet at a steady state of production, and US\$73 million was used to further reduce our debt.

This demonstrates the robustness of our international portfolio of assets and the improved cash generating potential of the portfolio once the South Deep mine achieves cash breakeven level, which is targeted for the end of 2016.

### Reducing debt

Owing to the fact that, as a gold producer, we are essentially a price taker for the primary product that we produce, we have long held the position that our debt comfort zone is a net debt to EBITDA ratio of approximately 1.0 times.

During 2015 our net debt decreased by US\$73 million from US\$1,453 million at the end of December 2014 to US\$1,380 million at the end of December 2015, which resulted in a net debt to EBITDA ratio of 1.38. This is in addition to the reduction of our net debt by US\$282 million to US\$1,453 million during 2014.

Net debt as a percentage of enterprise value increased to 39% at the end of December 2015, compared to 24% at the end of December 2014, amid the decline in our market value during the year.

The net debt reduction during 2014 and 2015, together with the agreement reached with our group of bankers in 2014, to amend and extend the maturity date of commitments totalling US\$745 million, by two years to November 2017, on the same terms, has significantly improved the Group's solvency and liquidity.

At the end of 2015, Gold Fields had committed and uncommitted loan facilities totalling US\$2,648 billion and R3.947 billion, of which US\$0.844 billion and R3.695 billion respectively are unutilised. The facilities will mature between 2017 and 2020, unless they are refinanced before their maturity dates.

Subsequent to year-end Gold Fields made a tender offer to buy back US\$200 million of our US\$1 billion 2020 bond as the bonds were trading at a discount on the secondary market. Upon expiry of the tender offer on 25 February 2016 Gold Fields opted to accept US\$148 million of the bonds tendered at a price of 88% of the notional value. This resulted in a reduction in net debt of approximately US\$18 million. Gold Fields intends holding the bonds acquired until their maturity date.

This debt buy back was funded through a successful R2.3 billion (US\$150 million) equity raising, by way of a private placement to institutional investors on 18 March 2016. The effect of these transactions will be a reduction in the net debt to EBITDA ratio from 1.38x as at 31 December 2015 to 1.21x and gets us closer to our strategic objective of reducing the ratio to 1.0x, though the timing of achieving this objective also depends on the gold price.

### Dividends

Gold Fields has a long and well-established 'dividends first' policy of rewarding shareholders by paying

out between 25% – 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 payout of approximately 30% of normalised earnings every year over the past six years, one of the highest pay-outs in the global gold mining sector.

Our strong cash generation during 2015 has enabled the Group to declare a final dividend of 21 SA cents per share for 2015. Together with the interim dividend of 4 SA cents per share (for the first six months of the year ended 30 June 2015), this brings the total dividend for the year to 25 SA cents per share, which translates to 34% of normalised earnings for the year.

### Improving investor and analyst confidence

We seek to position Gold Fields as a focused, lean and globally diversified gold mining company that generates significant free cash flow, and provides investors with superior leverage to the price of gold.

Gold Fields today is a significantly smaller, more focused and global company than it was before 2013. With the unbundling of our conventional South African mines into Sibanye Gold in 2013 we have created a company that is today exclusively focused on mechanised mining. Shareholders have also benefited from the creation of Sibanye Gold, whose share price has outperformed that of most other gold counters on the Johannesburg Stock Exchange.

Gold Fields' re-organisation was further enhanced by the successful restructuring and rightsizing of our corporate, regional and operational structures over the past three years, together with the reduction of our workforce around the world.

## 3.2 Financial focus – Strategic focus areas (continued)

Over the past three years, Gold Fields has successfully transformed itself into a company that consistently generates FCF despite the steady declines in the price of gold during this time. In 2012 and 2013, Gold Fields had net cash outflows of US\$280 million and US\$235 million respectively. In 2014, despite a 10% decline in the average gold price from US\$1,386/oz in 2013 to US\$1,249/oz, cash flow from operating activities – after taking account of net capital expenditure and environmental payments –

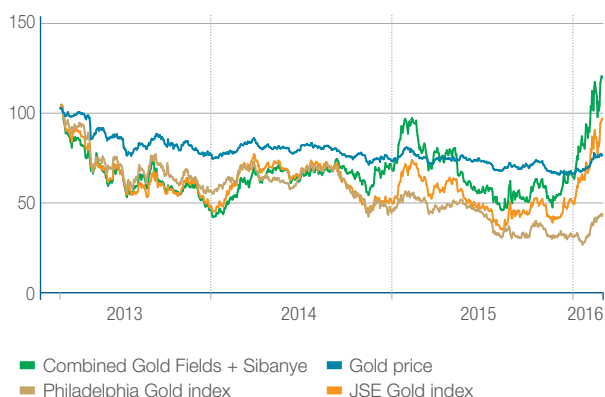
improved from an outflow of US\$235 million to an inflow of US\$470 million. In 2015, we managed to generate US\$123 million in net cash flow from operating activities, despite a further 9% decline in the gold price from US\$1,249/oz in 2014 to US\$1,140/oz in 2015.

The one outstanding issue that remains to be fully addressed, is to deliver the South Deep mine in South Africa and release the intrinsic value

of the asset, which has the world's second largest gold ore body. The achievement of cash breakeven for South Deep, which is targeted for the end of 2016, is expected to not only further enhance the Group's capacity to improve FCF generation but, in particular, to further improve market confidence in Gold Fields. A detailed update on the financial, operational and development performance of South Deep during 2015 is provided on page 73.

### Share price performance (Feb 2013 – Feb 2016)

(Index: 11 Feb 2013 = 100)



### Share price performance (Jan 2015 – Feb 2016)

(Index: 1 Jan 2015 = 100)



### Share price performance

Gold Fields has made a commitment to its investors to offer leverage to the gold price. This commitment was one of the main reasons why, in 2012, Gold Fields embarked on its major restructuring drive to enhance cash flows.

Since then Gold Fields has fundamentally transformed its business and become a focused, modern, mechanised mining operation, significantly reducing its cost base and thus offering greater cash returns. A key pillar of this transformation was the unbundling of Gold Fields' legacy mines in South Africa into Sibanye Gold – this was announced on 1 November 2012 and took effect on the stock exchanges on which Gold Fields is listed on 11 February 2013.

This transformation has, however, coincided with a slide in the gold price from levels of around US\$1,650/oz at the beginning of 2013 to approximately US\$1,050/oz at the end of 2015. By the end of February 2016, the price had recovered to around US\$1,200/oz.

The long-term share price performance of both Gold Fields and Sibanye Gold has validated this transformation journey. Just before the announcement of the Sibanye Gold unbundling on 28 November 2012, the Gold Fields share price was trading at R102.73/share. Since then Sibanye's share price in particular has performed strongly, rising by 320% to R57/share over the period. The combined share price of Gold Fields and Sibanye Gold on 29 February 2016 was valued at R122.56/share – an increase of 19.3% on its pre-announcement level.

Over the same period of time the gold price declined by 25.8%, the JSE gold index – representing gold miners listed on the JSE – fell by 5.3%, and the Philadelphia gold index – representing gold miners listed on the New York Stock Exchange – decreased by 57%. This represents a significant market endorsement of the Gold Fields' transformation decision.

Between 1 January 2015 and 29 February 2016, the Gold Fields share price improved by just over 25%, once again outperforming the gold price, which showed a 3.4% gain. The Philadelphia gold index still traded in negative territory, down 7%, but the JSE gold index has improved by 81% as JSE-listed gold miners received a boost by the stronger Rand gold price.

# 4

## Focus on business optimisation

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## 4.1 Business optimisation – Introduction

### Introduction

In 2015, Gold Fields consolidated its position as a more focused, leaner business and its portfolio is now characterised by modern, fully mechanised open-pit and underground mining operations, with diversified production spread across eight mines in four countries.

This supports our broader strategy focused on disciplined spending and cash-generation rather than ounces for ounces sake, enhancing the Company's ability to generate free cash flow and delivering investors value over and above the price of gold through its dividend policy and share price performance. As a result of this proactive strategy, Gold Fields has been in a favourable position to weather current low gold prices.

During 2015, Gold Fields continued to focus on improving the cash-generation performance of its existing operations. This included:

- ▶ The avoidance of marginal ounce mining, whilst protecting the commercial sustainability of its mines by eschewing high-grading and investing in ore development on an ongoing basis
- ▶ Enhanced cost-efficiency at all of its operations
- ▶ Production and strategic planning based on the delivery of healthy free cash flow margins at lower gold prices
- ▶ A back-to-basics strategy at the South Deep mine, which is showing early benefits in improving its operational performance

Similarly, Gold Fields focused on life extensions of its operations and the sustained cash flow margin per ounce of gold produced. This process of active portfolio management in 2015 resulted in:

- ▶ The continued focus on low-risk, near-mine exploration activities as opposed to early greenfields exploration, which saw resources increase by 13% in Australia
- ▶ Examining further cash-generative acquisition opportunities aligned with Gold Fields' core competencies
- ▶ The continued disposal of growth projects that are marginal and primarily focused on metals other than gold

Key operating statistics	2015	2014	2013 <sup>1</sup>	2012 <sup>1</sup>
Gold produced – attributable ('000 ounces)	<b>2,159</b>	2,219	2,022	2,031
Revenue (US\$m)	<b>2,545</b>	2,869	2,906	3,531
AISC (US\$/oz)	<b>1,007</b>	1,053	1,202	1,310
AIC (US\$/oz)	<b>1,026</b>	1,087	1,312	1,537
Gold price (US\$/oz)	<b>1,140</b>	1,249	1,386	1,656
Operating profit (US\$m)	<b>1,089</b>	1,191	1,239	1,879
Operating costs (US\$m)	<b>1,431</b>	1,685	1,679	1,674
Headline earnings (losses) (US\$m)	<b>(28)</b>	27	(71)	350
Normalised earnings (US\$m)	<b>45</b>	85	58	409
Net cash flow (outflow) (US\$m)	<b>123</b>	235	(235)	(280)
Free cash flow margin (%)	<b>8</b>	13	n/a	n/a

<sup>1</sup> Continuing operations



## 4.2 Business optimisation – Operational performance overview

### Group production and guidance

2016 Guidance			2015 Actual			2015 Guidance			2014 Actual		
Prod (Moz)	AISC (US\$/oz)	AIC (US\$/oz)	Prod (Moz)	AISC (US\$/oz)	AIC (US\$/oz)	Prod (Moz)	AISC (US\$/oz)	AIC (US\$/oz)	Prod (Moz)	AISC (US\$/oz)	AIC (US\$/oz)
2.05	1,000	1,035	2.16	1,007	1,026	2.17	1,055	1,075	2.22	1,053	1,087
-2.10	-1,010	-1,045									

In 2015, Gold Fields' attributable gold production declined by 2.7% to 2.16 million ounces (2014: 2.22 million ounces). This reflected:

- ▶ Higher production at St Ives in Australia, South Deep in South Africa and at Tarkwa in Ghana
- ▶ Lower production at Granny Smith, Agnew, Darlot in Australia, at Damang in Ghana and Cerro Corona in Peru

Central to Gold Fields' strategy of growing our margin and maximising FCF, is a relentless focus on managing costs on an AIC basis.

During 2015, the Group recorded AIC of US\$1,026/oz, from attributable gold equivalent production of 2.16 million ounces. Compared with 2014, the Group's AIC improved by 6% from US\$1,087/oz. If the South Deep mine, which is not yet at steady-state levels of production, is excluded from the results for 2015, then the Group's AIC was US\$944/oz.

The overall drop in Gold Fields' costs over the last three years is mainly due to lower operating costs, improved rationalisation and restructuring as well as prioritisation of growth capital expenditure allocation.

Over the past few years, Gold Fields has implemented a number of cost-focused initiatives that continued into 2015 and were pivotal to lowering the Group's cost base.

#### Production

**What Gold Fields guided for 2015:**  
2.17 million attributable gold equivalent ounces

**What Gold Fields achieved in 2015:**  
2.16 million attributable gold equivalent ounces

#### Costs

**What Gold Fields guided for 2015:**  
AISC of US\$1,055/oz;  
AIC of US\$1,075/oz

**What Gold Fields achieved in 2015:**  
AISC of US\$1,007/oz;  
AIC of US\$1,026/oz

### Group and regional managed production

	2015 Actual	2015 %	2014 Actual	2014 %
Australia	988.0	44.2	1,031.1	44.9
Peru	295.6	13.2	326.6	14.2
Ghana	753.9	33.7	736.0	32.1
South Africa	198.0	8.9	200.5	8.7
Group	2,235.6	100	2,294.2	100

These included:

- ▶ Stopping of marginal mining at all of the Group's mines
- ▶ The restructuring and rightsizing of our corporate, regional and operational structures, focused on relocating operational responsibility and accountability in the regions and at the operations. Our overall corporate costs have been reduced to approximately US\$10/oz, which is amongst the lowest in the industry
- ▶ A 12% reduction in our global workforce between 2013 and 2015
- ▶ Restructuring of the Group's Growth and International Projects division in late 2013 and the divestment of associated greenfields growth projects that did not meet the Group's 15% FCF margin criteria
- ▶ The cancellation of all on- or near-mine growth projects that demonstrated inadequate returns
- ▶ The ongoing rationalisation and prioritisation of capital expenditure and the deferral of non-essential capital, while not affecting the sustainability of our mines' ore bodies

## 4.2 Business optimisation – Operational performance overview (continued)

While the bulk of these initiatives were initiated and implemented during 2013 and 2014, consolidations of the gains made continued into and throughout 2015 through ongoing business process re-engineering and general cost savings. In particular the following initiatives were implemented:

- ▶ The further rationalisation of our growth portfolio during 2015 with the sale of Gold Fields' 51% interest in the Woodjam project in British Columbia (p77). The Group is also looking to divest its holding in the Arctic Platinum project in Finland (p87)
- ▶ The stabilisation of our workforce in 2015 after a net reduction of 12% in the preceding three years. During 2015 Gold Fields had to retrench 148 staff, led by 67 retrenchments each at our Ghanaian and Australian operations. However, at South Deep we recruited 164 critical skills in line with the rebasing strategy at the mine
- ▶ Unlike in previous years, Gold Fields did not cut back its capital expenditure. With a focus on extending the life of our ore bodies

at all our international mines we raised overall Group capital expenditure to US\$634 million in 2015 from US\$609 million in 2014. Regional capital expenditure included:

- ▶ Australia: Our Australian mines increased capital expenditure from A\$304 million (US\$274 million) in 2014 to A\$372 million (US\$281 million) in 2015, largely as a result of the rise in near-mine exploration spending to A\$91 million (US\$65 million) in 2015 (2014: A\$60 million (US\$54 million))
- ▶ South Africa: Capital expenditure at South Deep decreased from R994 million (US\$92 million) to R848 million (US\$67 million), despite acquiring a number of new heavy underground vehicles in 2015
- ▶ South America: At Cerro Corona capital expenditure increased from US\$51 million to US\$65 million amid ongoing construction of new tailings dams raises
- ▶ West Africa: Capital expenditure increased from US\$190 million in 2014 to US\$221 million in 2015,

largely the result of new equipment acquisition at Tarkwa

### Effect of oil prices on AIC

For Gold Fields, the impact of the lower oil price during 2015 was not significant. This is because in Ghana and Peru fuel price stability mechanisms are followed by government and short-term variations in prices are not always passed onto consumers and industry. All other things being equal the impact of a decrease of US\$10 per barrel of Brent crude on AIC is a reduction of US\$18/oz for Ghana, A\$6/oz (US\$5/oz) for Australia and US\$7/oz for Peru.

The Australian operations entered into a hedge at a base price of US\$99.10 per barrel of Brent crude on 10 September 2014. On 26 November 2014, an additional hedge at a base price of US\$78.45 per barrel of Brent crude was entered into. This resulted in 100% of diesel requirements for the March 2015 quarter and 75% of diesel requirements for the remaining nine months (April to December) of 2015 for Australia being hedged.



▶ Borehole drilling at our Australian operation

## Group regional performance – overview

### Americas region

	2016 Guidance	2015 Actual	2015 Guidance	2014 Actual
Gold only produced (koz)	150	158.8	147	150.8
Copper produced (tonnes)	28	28.7	28	32.3
Gold-equivalent produced (koz)	260	295.6	280	326.6
AIC/AISC (US\$/oz)	790	718	800	316
AIC/AISC gold-equivalent ounces (US\$/oz)	860	777	915	702

Despite the significant 28% decline in the price of copper during 2015, **Cerro Corona** in Peru recorded a relatively good performance with total managed gold equivalent production of 295,600 ounces which was 6% better than the guidance for 2015 of 280,000 ounces. It was, however, 9% lower than the 326,600 ounces produced in 2014, mainly as a result of the lower copper price (as a consequence of its impact on gold-equivalent production) and a planned decline in gold and copper grades, as per the life-of-mine plan.

Net operating costs decreased by 9% from US\$160 million in 2014 to

US\$145 million in 2015 mainly the result of the lower Nuevo Sol exchange rate against the US Dollar, good cost management and lower ore tonnes mined. Capital expenditure increased from US\$51 million in 2014 to US\$65 million in 2015, mainly related to the ongoing construction of the tailings storage facility as well as the construction of a new camp as the existing camp will be flooded later in 2016, as the tailings dam expands.

AISC and AIC amounted to US\$718/oz in 2015 compared with US\$316/oz in 2014 – and, on a gold equivalent basis, US\$777/oz in 2015

compared with US\$702/oz in 2014 – due to lower gold sold, lower by-product credits and higher capital expenditure, partially offset by lower net operating costs.

The region reported net cash inflow of US\$35 million during 2015.

#### 2016 Guidance:

- › Gold only production: 150,000 ounces
- › Copper production: 28,000 tonnes
- › Gold equivalent production: 260,000 ounces
- › AIC/AISC: US\$790/oz
- › AIC/AISC (gold-equivalent production): US\$860/oz



› Tailing Storage Facility at Cerro Corona

## 4.2 Business optimisation – Operational performance overview (continued)

### Australia region

	2016 Guidance		2015 Actual		2015 Guidance		2014 Actual	
	Prod (Koz)	AIC/ AISC (A\$/oz)	Prod (Koz)	AIC/ AISC (A\$/oz)	Prod (Koz)	AIC/ AISC (A\$/oz)	Prod (Koz)	AIC/AISC (A\$/oz)
St Ives	350	1,380 (US\$1,010)	371.9	1,287 (US\$969)	350	1,300 (US\$1,040)	361.7	1,289 (US\$1,164)
Agnew	223	1,350 (US\$990)	236.6	1,276 (US\$959)	260	1,190 (US\$950)	270.7	1,096 (US\$990)
Darlot	58	1,660 (US\$1,215)	78.4	1,403 (US\$1,057)	83	1,420 (US\$1,130)	83.6	1,353 (US\$1,222)
Granny Smith	270	1,170 (US\$855)	301.1	1,016 (US\$764)	290	1,050 (US\$840)	315.2	896 (US\$809)
Region	901	1,330 (US\$970)	988.0	1,211 (US\$912)	983	1,210 (US\$965)	1,031.1	1,124 (US\$1,015)

During 2015 the Group's four mines in Western Australia – St Ives, Agnew, Darlot and Granny Smith – collectively delivered a strong operational performance, with gold production of 988,000 ounces at an AIC of A\$1,211/oz (US\$912/oz), which was broadly in line with full year guidance for the region of 983,000 ounces at an AIC of A\$1,210/oz (US\$965/oz).

Compared to 2014, production decreased by 4% from 1,031,100 ounces mainly as a result of planned lower production from Granny Smith, Agnew and Darlot, offset by higher production from St Ives. Both St Ives and Granny Smith exceeded their guidance for the year, compensating for Darlot and Agnew, both of which delivered below guidance.

Net operating costs in the region decreased by 7% from A\$799 million (US\$721 million) to A\$747 million (US\$562 million), mainly due to tight cost control, while capital expenditure increased from A\$304 million (US\$274 million) to A\$373 million (US\$281 million) following the opening up and development of new ore sources at the mines as well as higher expenditure on near-mine exploration across the region.

Total AIC for the region of A\$1,211/oz (US\$912/oz) in 2015 compared with A\$1,124/oz (US\$1,015/oz) in 2014.

The region reported net cash inflow of US\$255 million during 2015. The lower value of the Australian Dollar against the US Dollar had a beneficial impact on the region's performance as the average gold price received rose from A\$1,404/oz in 2014 to A\$1,541/oz in 2015. Taking into account the 43,100 ounce drop in production in the region, this had the impact of boosting revenue by A\$75 million.

#### Mine performances

**St Ives** had an outstanding year as it started to make the transition from a predominantly underground mine to a predominantly open pit mine. Gold production increased by 3% from 361,700 ounces in 2014 to 371,900 ounces in 2015, against guidance of 350,000 ounces for the full year. The increase in production was mainly due to higher grades mined from the new high grade Invincible open pit, partially offset by lower production from the Athena underground mine which is scheduled to close in early 2016.

Net operating costs decreased by 6% from A\$313 million (US\$282 million) in 2014 to A\$293 million (US\$220 million) due to good cost control. Total AIC of A\$1,287/oz (US\$969/oz) in 2015 compared with A\$1,289/oz (US\$1,164/oz) in 2014, which was 1% better than guidance of A\$1,300/oz for the year.

The good cost performance at St Ives was mainly due to the higher production as well as tight cost control, partially offset by higher capital expenditure of A\$152 million. The higher capital expenditure was associated with increased exploration across the site; the development of the Invincible open pit mine; and the commencement of the stripping campaigns at the Neptune and A5 pits. These two pits are expected to complement the Invincible Pit as St Ives moves towards being a predominantly open pit operation after the closure of the Athena underground mine.

St Ives generated net free cash flow of US\$119 million for the year.

A brief review of the mine's brownfields exploration activity during 2015 is on page 79.

**2016 Guidance:**

- ▶ Gold production: 350,000 ounces
- ▶ AISC/AIC: A\$1,380/oz (US\$1,010/oz)

At **Agnew**, gold production decreased by 13% from 270,700 ounces in 2014 to 236,600 ounces in 2015. The reduced production was mainly due to lower tonnes mined as well as lower grades. The change to sequence was caused mainly by challenging geotechnical conditions at Waroonga's Kim ore body, where ground conditions necessitated rehabilitation and extra ground support. This resulted in slower rates of mining in some higher grade areas and the consequent substitution of higher grade tonnages with lower grade areas elsewhere in the Waroonga complex.

Waroonga is in transition as the Kim load matures. During the year the new drive from the Kim decline to the high grade Fitzroy, Bengal and Hastings (FBH) ore bodies was completed and development activities commenced. Production from FBH is scheduled to increase during 2016. In addition, decline development started to the Cinderella ore body in the New Holland complex. Cinderella straddles the tenement boundary between New Holland and Waroonga and will be accessed through the existing New Holland infrastructure.

The lower production combined with good cost control resulted in the net operating costs decreasing from A\$191 million (US\$173 million) in 2014 to A\$188 million (US\$141 million) in 2015. Total AIC for Agnew of A\$1,276/oz (US\$959/oz) in 2015 compared with A\$1,096/oz (US\$990/oz) in 2014, due to lower gold production and higher capital expenditure, partially offset by the lower net operating costs. The higher capital expenditure of A\$97 million was as a result of increased expenditure on exploration as well as

capital developments associated with accessing the FBH and Cinderella deposits.

Despite the difficult production issues, Agnew generated US\$47 million of net free cash during 2015.

A brief review of the mine's brownfields exploration activity during 2015 is on page 79.

**2016 Guidance:**

- ▶ Gold production: 223,000 ounces
- ▶ AISC/AIC: A\$1,350/oz (US\$990/oz)

**Darlot** had a challenging year due to the constraints of mining in scattered remnant areas over a relatively large footprint, while developing towards the higher grade Lords South Lower virgin ore body. As a consequence gold production decreased by 6% from 83,600 ounces in 2014 to 78,400 ounces in 2015 due to lower tonnes mined and processed. This was partially offset by higher grades mined in the new Lords South Lower deposit, where production commenced during the second half of the year.

Notwithstanding the difficulties associated with mining in remnant areas, Darlot is continuing its strategy of self-funding a meaningful exploration programme in order to extend the mine's life and to find a 'game changer', which is targeted to return the mine to a 15% free cash flow margin.

Net operating costs decreased by 15% from A\$93 million (US\$84 million) in 2014 to A\$79 million (US\$59 million) in 2015. Total AIC of A\$1,403/oz (US\$1,057/oz) in 2015 compared with A\$1,353/oz (US\$1,222/oz) in 2014, due to lower gold output and higher capital expenditure of A\$27 million, partially offset by lower operating costs.

Darlot generated US\$11 million of net free cash flow for the year.

A brief review of the mine's brownfields exploration activity during 2015 is on page 79.

**2016 Guidance:**

- ▶ Gold production: 58,000 ounces
- ▶ AISC/AIC: A\$1,660/oz (US\$1,215/oz)

**Granny Smith** enjoyed another strong operational performance during 2015. Production guidance anticipated a 5% decline in gold production from the 315,200 ounces in 2014 to 301,100 ounces in 2015, but the mine managed to beat the guidance by 4% instead.

The mine generated US\$111 million of net free cash for the year.

Attention to cost control and efficiencies realised through a margin improvement programme resulted in a 7% decrease in net operating costs from A\$202 million (US\$183 million) in 2014 to A\$188 million (US\$141 million) in 2015. Total AIC of A\$1,016/oz (US\$764/oz) in 2015 compared with A\$896/oz (US\$809/oz) in 2014 due to the lower gold production and higher capital expenditure, with these effects being partially offset by the lower operating costs.

The higher capital expenditure of A\$96 million was due to a record programme of mine development and a very substantial increase in exploration activity. The mine development programme saw 5.4km of horizontal capital development advanced (2014: 2.2km), providing access to lower ore horizons at the Wallaby mine. These zones will provide the bulk of the operation's ore for 2016.

A brief review of the mine's brownfields exploration activity during 2015 is on page 80.

**2016 Guidance:**

- ▶ Gold production: 270,000 ounces
- ▶ AISC/AIC: A\$1,170/oz (US\$855/oz)

## 4.2 Business optimisation – Operational performance overview (continued)

### South Africa region

	2016 Guidance	2015 Actual	2015 Guidance	2014 Actual
Gold only produced (kg/(koz))	8,000 (257)	<b>6,160</b> <b>(198.0)</b>	<b>7,100</b> <b>(228.0)</b>	6,237 (200.5)
AISC (R/kg (US\$/oz))	550,000 (1,200)	<b>607,429</b> <b>(1,490)</b>	<b>520,000</b> <b>(1,400)</b>	538,254 (1,548)
AIC (R/kg (US\$/oz))	575,000 (1,250)	<b>635,622</b> <b>(1,559)</b>	<b>545,000</b> <b>(1,470)</b>	602,363 (1,732)

At the **South Deep** mine, production remained steady during 2015 with production of 198,000 ounces compared with 200,500 ounces in 2014, mainly due to lower grades, partially offset by increased volumes. Higher wage increases and rises in other operating costs led to net operating costs rising by 13% from R2.66 billion (US\$246 million) in 2014 to R3 billion (US\$237 million) in 2015. Capital expenditure at South Deep decreased from R994 million (US\$92 million) in 2014 to R848 million (US\$67 million) in 2015.

AIC of R635,622/kg (US\$1,559/oz) in 2015 compared with AIC of R602,363/kg (US\$1,732/oz) in 2014 due to lower gold sold and higher operating costs, partially offset by lower capital expenditure.

The 17% weakening of the South African Rand against the US Dollar during 2015 had a beneficial impact on South Deep as the average Rand gold price received strengthened from R441,981/kg in 2014 to R478,263/kg in 2015. South Deep's revenues in 2015 benefited by

around R190 million (US\$15 million), taking into account the marginal drop in production and all other variables being equal. Progress on the re-basing of the South Deep mine can be found on pages 73 and 74.

#### 2016 Guidance:

- ▶ Gold production: 257,000 ounces
- ▶ AISC: US\$1,200/oz
- ▶ AIC: US\$1,250/oz
- ▶ De-stress development: 36,000m<sup>2</sup> (2015: 29,071m<sup>2</sup>)

### West Africa region

	2016 Guidance		2015 Actual		2015 Guidance		2014 Actual	
	Prod (Koz)	AISC/AIC (US\$/oz)	Prod (Koz)	AISC/AIC (US\$/oz)	Prod (Koz)	AISC/AIC (US\$/oz)	Prod (Koz)	AISC/AIC (US\$/oz)
2015								
Tarkwa	560	940	<b>586.1</b>	<b>970</b>	<b>580</b>	<b>1,040</b>	558.3	1,068
Damang	150	1,160	<b>167.8</b>	<b>1,326</b>	<b>180</b>	<b>1,220</b>	177.8	1,175
Region	710	986	<b>753.9</b>	<b>1,049</b>	<b>760</b>	<b>1,180</b>	736.0	1,094

Gold Fields' two mines in Ghana, Tarkwa and Damang, produced a strong operational performance in 2015. Total managed gold production of 753,900 ounces was less than 1% below guidance of 760,000 ounces for the year and 2% higher than the 736,000 ounces produced in 2014. Strong cost management ensured a 7% decrease in net operating costs from US\$551 million in 2014 to US\$513 million in 2015, while capital expenditure increased from US\$190 million in 2014 to US\$221 million in 2015. As consequence AIC for the region of US\$1,049/oz was 12% better than

the guidance of US\$1,180/oz for the year and 4% better than the US\$1,094/oz reported in 2014.

While the aggregate performance of the region was outstanding during 2015, it somewhat masks the exemplary performance of Tarkwa on the one hand, and the significant operational challenges faced by Damang on the other hand. The region as a whole reported net cash inflow of US\$44 million during 2015, of which Tarkwa contributed US\$76 million while Damang had a negative cash flow of US\$32 million for the year.

#### Electricity challenges

One of the key challenges facing Gold Fields Ghana is the curtailment on electricity usage by the industry. Government has enforced a 33% power-shedding programme on all mining and industrial companies. In response Gold Fields Ghana has signed a purchasing power agreement with independent power producer Genser, whereby the company is installing three 11MW solar turbines at Tarkwa and four solar 5.5MW turbines at Damang. These plants are scheduled to be operational in the second half of 2016.

### Mine performances

At **Tarkwa**, which is the largest and one of the most consistent producers in the Gold Fields Group, gold production increased by 5% from 558,300 ounces in 2014 to 586,100 ounces in 2015, which was also 1% higher than the guidance of 580,000 ounces for the year. This improvement was mainly due to higher grades mined from the Teberbie pillar and surrounding high grade areas. Throughput and efficiencies in the processing plant also improved significantly.

Net operating costs improved by 12% from US\$372 million in 2014 to US\$327 million in 2015 due to ongoing business improvement initiatives across all facets of the operation as well as the lower oil price. As a consequence of the increase in gold production and improved cost management, offset by higher capital expenditure associated with fleet replacement and increased stripping, AIC improved by 9% from US\$1,068/oz in 2014 to US\$970/oz in 2015.

Tarkwa's processing plant achieved record throughput in 2015 of 13.5 million tonnes compared to 13.4 million tonnes in 2014.

Tarkwa generated net free cash of US\$76 million during 2015.

A brief review of the mine's brownfields exploration activity during 2015 is on page 80.

#### 2016 Guidance:

- Gold production: 560,000 ounces
- AISC/AIC: US\$940/oz

**Damang** had a challenging year with managed gold production of 167,800 ounces, 7% below guidance for the year and 6% below 2014 production of 177,800 ounces. The lower production was mainly as a result of lower grades caused by inadequate exposed and available high grade ore in the pits, in particular at the Juno South East and Saddle Bridge areas.

Net operating costs increased by only 3% from US\$180 million in 2014 to US\$186 million in 2015 mainly due to increased tonnes processed as well as higher fuel costs, amid the

increased use of diesel generators to compensate for power disruptions as well as additional load shedding requirements by the state electricity utility ECG. Total AIC of US\$1,326/oz in 2015 was 9% higher than guidance and 13% above the US\$1,175/oz recorded in 2014. The mine's net cash outflow totalled US\$32 million in 2015.

To address the loss making position of Damang, a comprehensive review of the mine commenced during the second half of 2015, with a view to evaluating all options for the future of the mine. Options being considered include a push back to expose higher grade ore under the original Damang pit or placing the mine in care and maintenance.

A brief review of the mine's brownfields exploration activity during 2015 is on page 80.

#### 2016 Guidance:

- Gold production: 150,000 ounces
- AISC/AIC: US\$1,160/oz

This represents a 'holding plan' pending the outcome of the review of different options for the mine.



➤ Aerial view of the Damang mine

## 4.3 Business optimisation – Strategic focus areas

### Safety and wellness

#### Occupational disease at the South Deep mine (rate per 1,000 employees)

	2015	2014 <sup>1</sup>	2013 <sup>1</sup>
Noise-induced hearing loss (NIHL) <sup>2</sup>	0.68	1.52	0.62
Cardio-respiratory tuberculosis (CRTB)	6.16	9.15	6.5
Silicosis <sup>1</sup>	1.54	2.67	1.86
Chronic obstructive airways disease (COAD) <sup>2</sup>	0.17	0.76	0.00
South Deep workforce	5,837	5,246	6,466

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

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

Gold Fields continues to uphold its promise, 'if we cannot mine safely, we will not mine'. This reflects the need to minimise any potential negative impact on people, maintain operational continuity and protect the Company's reputation. Gold Fields' Group annual performance bonus contains a significant safety component (p133). Furthermore, maintaining safe and healthy working conditions is a key compliance issue for the Company.

As stated in its Occupational Health and Safety Policy, Gold Fields strives for 'Zero Harm' at all of its operations and to minimise occupational health and safety hazards. All of the Group's operations are certified to the OHSAS 18001 international health and safety management standard and are fully compliant with the requirements of the International Cyanide Management Code (ICMC). As Cerro Corona produces a copper-gold concentrate it is not required to comply with the ICMC

### Safety performance

#### Group safety performance

	2015	2014	2013
TRIFR <sup>1</sup>	3.40	4.04	4.14
Fatalities	4 <sup>5</sup>	3	2
Lost time injuries <sup>2</sup>	68	75	52
Restricted work injuries <sup>3</sup>	68	84	73
Medically treated injuries <sup>4</sup>	35	38	54
Total recordable injuries	174	200	181
Total hours worked	51,198,910	49,456,833	43,767,818

<sup>1</sup> Total Recordable Injury Frequency Rate (TRIFR) Group safety metric was introduced in 2013. TRIFR = (Fatalities + Lost Time Injuries + Restricted Work Injuries + Medically Treated Injuries) x 1,000,000/number of man-hours worked

<sup>2</sup> 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. The employee or contractor is unable to perform any of his/her duties

<sup>3</sup> A Restricted Work Injury (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. The employee or contractor can still perform some of his/her duties

<sup>4</sup> A Medically Treated Injury (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

<sup>5</sup> Three of the four fatalities were workplace accidents. A fourth fatality was a member of the protection services team at South Deep who was shot and killed during a robbery at the mine

During the reporting period, the Group's overall Total Recordable Injury Frequency Rate (TRIFR) improved by almost 16% to 3.40 recordable incidents per million man-hours (2014: 4.04). This reflected:

- ▶ A significant reduction in the total recordable injuries at South Deep (p69)
- ▶ A continued reduction in total recordable injuries at our Australian operations, with the exception of the Granny Smith mine, following the entrenchment of a behavioural-based health and safety strategy (p69)
- ▶ A deterioration in the TRIFR at Cerro Corona as well as our Ghanaian mines (p69)

Nevertheless, we reported four fatalities during 2015. Three fatalities occurred at the South Deep mine in South Africa and one at the Tarkwa mine in Ghana:

- ▶ In March, Kennedy Katongo, a boilermaker, was injured at a station tip. He succumbed to his injuries in hospital three days later.
- ▶ Alberto Chiungo, a contracted locomotive operator, was fatally injured in May, when he was caught between the loco and a hopper during tramming operations
- ▶ In August, Sbongiseni Ngqoleka, a security contractor, was shot and killed by armed robbers targeting copper cables at South Deep. Two other security personnel were injured in the same attack
- ▶ In December, a spotter at Tarkwa, Clement Aidoo, was struck and fatally injured by a truck when it reversed after dumping its load of material

The two fatal mine accidents at South Deep and a further serious injury at the mine precipitated the issuing of Section 54 orders by the Department of Mineral Resources, placing a moratorium on mine-related activities across the mine. This effectively stopped production at the mine for a total of 18 days, with production losses estimated at around 8500 ounces.



## Safety management

Details of specific regional safety initiatives implemented in 2015 are set out below:

### Americas region

In 2015, the TRIFR at the Cerro Corona mine deteriorated to 1.09 from 0.38 in 2014, largely the result of an increase in total recordable injuries from two to seven during the year. While a number of audits were performed on the mine's safety management system, with no major findings reported, the mine has intensified a safety campaign that commits all employees and contractors to zero accidents. The campaign contains 10 relevant safety rules that every employee and contractor has to sign up to and focuses on improving the leadership skill of safety supervisors and conducting robust risk assessments before performing tasks.

### Australia region

For 2015, the TRIFR for Gold Fields Australia improved by 4.5% over 2014 and the number of recordable injuries fell from 97 to 92. The St Ives, Agnew and Darlot mines recorded continued improvements in their recordable injury frequency rates, but at Granny Smith the TRIFR deteriorated from its low 2014 base during 2015.

The rising TRIFR trend at Granny Smith has been predominantly related to incidents underground. Efforts to address the trend are focused around a re-vitalisation of the Vital Behaviours programme, specifically in the underground areas, providing coaching and mentoring for supervisors and managers and a return to the required levels of discipline on safety protocols and systems. Launched in May 2014, the programme has achieved an overall reduction in total recordable injuries of around 30% over the period of 2013 to 2015.

A risk assessment undertaken on all recordable injuries since 2012 indicates that the risk of incidences that result in recordable injuries is steadily declining with no high-risk events having occurred since the implementation of Vital Behaviours in 2014 and 2015.

However, a re-vitalisation of the Vital Behaviours programme and safety discipline will be instituted in 2016 to reinforce safety culture and standards at our mines. A particular focus will be new employees and contractors, where there is evidence of a greater risk of injury.

### South Africa region

The South Deep mine reported two mining-related fatalities and one fatal shooting in 2015, undoubtedly the low point in its safety performance during the year. The fatalities were a setback on the mine's path to Zero Harm, but overall South Deep showed a strong improvement in its safety performance as highlighted by the 37% improvement in TRIFR from 4.65 in 2014 to 2.91 in 2015. Total injuries improved from 167 to 68 over the same period, while the Serious Injury Frequency Rate improved by 21%. A 38 injury-free day record was achieved during Q4.

A number of new initiatives were launched in 2015 to complement and support the behavioural-based incident-management system, which is the base for the mine's safety campaign. These include:

- › Proper start-up procedures through workplace assessments and employees' medical screening
- › Increased visibility underground through multi-discipline audits and management presence
- › The launch of a number of safety enablers, such as competitions and recognition awards
- › A weekly safety meeting at which all incidents are discussed and analysed

- › A compliance system checklist that ensures work is stopped if a workplace is not fully compliant with safety standards
- › Ongoing monitoring of the top five accident causes and ensuring appropriate measures are in place
- › The inclusion of leading and lagging indicators in the analysis of the safety component of the bonus. Achievement of safety targets accounts for 30% of the total bonus paid to teams

In addition to behavioural-based management, South Deep has also intensified its effort to engineer-out safety risks. As part of this a rail-bound proximity detection system was completed in Q1 2016, through which all 56 locomotives at the mine have been fitted and relevant operators and artisans trained in its usage. The second phase of the project will comprise the installation of fixed beacons at the mine in 2016, to facilitate communication between the locomotives.

Fall-of-ground accidents have been on a steady decline and fell from eight in 2014 to six in 2015. We continue to work with outside institutions, including the Institute of Mine Seismology, to monitor, understand and mitigate against seismic underground events.

A further focus on safety management in 2016 will be placed on safety practices for contractors through a dedicated incident management system.

### West Africa region

In 2015, there was a deterioration in the overall safety performance of the region, with the TRIFR rate rising to 1.02 from 0.75 in 2014 and total recordable injuries rising to 21, from 15 in 2014. The Tarkwa mine also reported a fatality in 2015, the first at our West African operations in four years.

## 4.3 Business optimisation – Strategic focus areas (continued)

Several interventions are being considered to prevent a re-occurrence of the accident, which occurred when a dump truck ran over a spotter after he had offloaded waste rock. The mine is looking at a number of ways of eliminating the human interface with machinery, wherever possible, and investigations have also begun into the use of other spotting systems for trucks.

A key part of the safety strategy is a zero tolerance approach to drug and alcohol usage. As part of the mines' zero tolerance approach almost 126,664 sobriety tests were conducted during 2015 and 15 employees and contractors, who were found to be over the limit, were discharged immediately. The zero tolerance approach is supported by free counselling and educational sessions on drug and alcohol abuse.

Behavioural-based safety programmes are being intensified to arrest the weaker safety record at both mines and more regular meetings between senior management and their teams on safety are now taking place. The majority of safety-related incidents involve contractors on site and greater pressure is being exerted on contractor management to ensure effective supervision and implementation of safety standards.

### Employee health and wellness management

Gold Fields is committed to reducing the exposure of its employees to occupational health risks, including those associated with air quality, silicosis, tuberculosis and hearing loss. As such, each region has implemented occupational health and hygiene monitoring for diesel particulates, respirable and silica dust, other airborne pollutants, radiation and noise. Particular emphasis is placed on managing the underground working environments in Gold Fields' Australian and South African operations, due to the heightened health risks that

underground mining poses to workers.

There have been significant improvements in occupational health and wellness rates throughout the Group during 2015. The number of occupational health cases submitted for compensation by the Group was as follows:

- › Six cases of NIHL (2014: 13)
- › Nine cases of Silicosis (2014: 15) at South Deep

Furthermore, in 2015, 36 new cases of CRTB (2014: 49) were recorded. In addition, the COAD rate has decreased by 78% from 0.76 (2014) to 0.17 (2015) at the South Deep mine.

Wellness is a material issue given the location of Gold Fields' mines, the nature of employees' working patterns and the lifestyle challenges associated with the sector. All of Gold Fields' regions run dedicated wellness 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, whilst also maximising its productive capacity and reducing absenteeism.

### Noise

During 2015, Gold Fields' South Deep mine achieved a significant 55% improvement in the NIHL rate to 0.68 per 1,000 employees and in the number of NIHL cases submitted from eight in 2014 to four in 2015. Throughout 2015, the mine met the Mine Health and Safety Council (MHSC) milestone for equipment noise not to exceed 110 (A-weighted) decibels (dB(A)). Personal noise sampling results, even though they are steadily improving, indicate that 72% of South Deep's personnel are potentially exposed to noise measurements above the Occupational Exposure Limit (OEL) of 85dB. It is important to note that these measurements do not

incorporate the noise reduction effect provided by hearing protection devices, which are freely available at South Deep, and are compulsory to wear in demarcated areas.

South Deep continues to implement a range of medical, educational and engineering interventions to improve its performance. These include:

- › Thorough examinations during pre-employment and periodic medical examinations
- › Early diagnosis and management of treatable medical diseases
- › Preventative counseling on NIHL
- › Silencing of underground fans and pumps
- › Application of noise management measures to the underground mining fleet
- › Participation in Chamber of Mines' occupational health initiatives
- › Distribution of personalised moulded hearing protection devices to high-risk employees, a programme that is 65% complete

The Mine Health and Safety Council (MHSC) has set new targets, which require that total noise emitted by all mining equipment should not exceed 107 dB(A) by 2024. South Deep will continue to develop and enhance technical solutions to achieve this target.

At our Australian operations a comprehensive NIHL strategy was rolled out during the year, to ensure that the management of noise is standardised within the region. This strategy, which remains a key priority, optimises current practices and aims to maintain personal noise exposures below 85dB(A) for the duration of the shift. The strategy centres around four pillars:

- › Adopting a risk-based approach
- › Implementation of controls and engineering solutions to reduce exposures
- › Enforce the correct use of appropriate personal protective equipment (PPE)
- › Ongoing monitoring to assess the efficacy of our controls

A number of audiometric tests at our operations showed that the strategy is demonstrating early success.

There were no reportable NIHL cases in the region and at St Ives, where audiometric testing was completed for 127 workers exposed to above 95dB(A) in the underground and open pit operations, none reported positive for NIHL. Furthermore, only nine vehicles and machinery equipment across our four operations recorded noise levels above 110dB(A) throughout 2015. Operators of this equipment use appropriate hearing protection to ensure noise levels below 85dB(A).

In West Africa during 2015, the number of NIHL cases reported fell to two from five in 2014, but personal noise samples taken at our Tarkwa and Damang mines regularly reveal high percentages above our internal standard of 85dB(A). This does not factor in the mitigating impact of hearing protection devices. Noise management measures implemented to protect employees working in these environments include:

- ▶ The mandatory use of hearing protection devices (ear plugs and ear muff) in areas with noise exposures above 85dB(A)
- ▶ Introduction of noise engineering controls, where feasible, to reduce potential exposure from identified noise sources
- ▶ Introducing pump and fan silencing methods and technologies

Controlling equipment cabin noise is another focus of our Ghanaian operation as a small percentage of 160 machines assessed during 2015 exceed the internal benchmark of 83dB(A). Continuous monitoring of the operator workstations as well as a number of in-pit machines such as drill rigs, excavators, dump trucks and graders are undertaken every six months. Engineering controls, such

as sound proof seals for equipment operator cabins, are also having a positive impact on noise levels.

#### *Silica dust exposure*

In 2015 the MHSC introduced new aspirational silica dust exposure targets for South African gold mines, called 'silica dust milestones'. These milestones require that personal exposure levels to silica dust be reduced from 0.1mg/m<sup>3</sup> to <0.05mg/m<sup>3</sup> by 2024. In Q4 2015, South Deep reported that 23% of the personal silica dust samples exceeded this level. This is an improvement from the 38% over exposures recorded in Q1 2015, but South Deep has accelerated the implementation of a range of improved dust control measures, including:

- ▶ Real-time dust monitoring
- ▶ The fitting of water mist sprays at dust sources
- ▶ Dust management controls on footwalls and internal tips
- ▶ Installation of manually controlled water blasts in all working areas

In South Africa, during 2015 the Silicosis rate per 1,000 employees improved by 43% to 1.54 from 2.67 in 2014 with the number of Silicosis cases submitted to the relevant health authorities falling from 14 to nine. Similarly, the CRTB rate improved by 33% in 2015 to 6.16 per 1,000 employees and the number of CRTB cases submitted fell to 36 in 2015 from 48 in 2014.

The industry working group formed in 2014 to address issues relating to compensation and medical care for occupational lung disease in the South African gold mining industry, had extensive engagements with a wide range of stakeholders in 2015, including government, organised labour, other mining companies and legal representatives of claimants

who have filed legal suits against the companies.

The companies – Anglo American South Africa, AngloGold Ashanti, African Rainbow Minerals, Gold Fields, Harmony and Sibanye – believe that fairness and sustainability are crucial elements of any solution and are working together with these stakeholders to design and implement a comprehensive solution that is both fair to past, present and future gold mining employees and also sustainable for the sector.

The companies are among respondent companies in a number of lawsuits related to occupational lung disease, but do not believe that they are liable in respect of the claims brought, and they are defending these. The companies have been working for many years to try to eliminate the incidence of occupational lung disease at their mines. These efforts continue.

At our open pit operations in Ghana, Australia and Peru, contact with silica dust is limited due to the nature of open pit mining and the low silica content of the ore bodies.

In 2015, there were no new cases of Silicosis and CRTB at our Ghanaian operations. However, there was only one case each in 2014. Despite this, regular gravimetric sampling of respirable silica dust samples are carried out and evaluated at our Tarkwa mine in Ghana.

#### *Diesel Particulate Matter (DPM)*

Gold Fields undertakes regular monitoring and analysis of the concentration of DPM at all of its operations. This issue is particularly material at Gold Fields' underground mines in Australia and South Africa, due to the potential concentration of particulates in specific working areas.

## 4.3 Business optimisation – Strategic focus areas (continued)

While there are no regulatory limits, the Australia region implemented a strategy in 2014 designed to reduce exposure to DPM with a focus on fitting filters to equipment, refining maintenance schedules, ensuring the correct levels of ventilation and providing appropriate procedural controls.

Sampling programmes during 2015 have indicated the success of this initiative with a dramatic decline in DPM levels underground, to a point where only 1% of samples (2014: 2%) have exceeded the 70mg/m<sup>3</sup> target recommended by the Australian Institute for Occupational Hygienists. Furthermore, a two-year study on DPM exposure on drill-rig operators at Granny Smith, showed a conclusive reduction in exposures that are attributed to diesel particulate filters, ventilation management and operator education.

In South Africa, the Department of Mineral Resources has developed a draft regulatory framework to establish a DPM OEL. This proposal, published in February 2014, recommended a four-year 'step-in-approach' starting at 350mg/m<sup>3</sup> in 2015 and systematically decreasing to 160mg/m<sup>3</sup> by January 2018. Gold Fields has over the years introduced a range of measures to improve monitoring and bring down the DPM exposure levels underground. These include the acquisition of vehicles and machines with more advanced engine technology as well as a new fuel supply contract – started in Q3 2014 – through which South Deep now receives only ultra-low sulphur content diesel (10ppm). This is having the desired impact – the 2015 350ug/m<sup>3</sup> DPM OEL was only exceeded in 1.7% of samples last year compared with 4.5% in 2014 and 19.1% in 2011. The 2018 160ug/m<sup>3</sup> OEM was exceeded in 11.2% of samples in 2015 compared with 25.8% in 2014 and 60.6% in 2011. South Deep is looking at accelerating the research into the fitment of diesel particulate filters to achieve further reductions.

In Ghana, the exposure levels and concentration of personal and area DPM samples obtained were insignificant, approximately 200% below the OEL. The DPM monitoring programme was therefore discontinued.

### HIV/Aids

HIV/Aids management is integrated into Gold Fields' mainstream health services to improve worker participation and minimise stigmatisation. Voluntary Counselling and Testing (VCT) takes place during regular employee health assessments. This has the added benefit of directly addressing the interaction of HIV/Aids with related health issues such as tuberculosis (TB) and other sexually transmitted infections (STIs).

Gold Fields' workforce in South Africa faces a particular risk of exposure to HIV/Aids, in a national context where an estimated 19% of adults (aged 15 to 49) live with the disease. Gold Fields is committed to lowering the HIV/Aids prevalence at South Deep, where 69 employees tested positive in 2015, compared with 54 in 2014. South Deep's integrated HIV/Aids, STI 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 employees, contractors, their partners and family members on a confidential basis. In 2015, the mine's VCT participation rate was around 17%
- ▶ **Treatment:** Free Highly Active Anti-retroviral Treatment (HAART) is provided to HIV-infected employees through onsite, doctor-staffed clinics. In 2015, 50 employees joined the HAART programme (2014: 58). This takes the total number of active participants to 296 (2014: 262), with 480 cumulatively enrolled since the HAART programme began in 2004. Employees' dependants can also receive HAART via the Company's medical aid schemes

- ▶ **Support:** This includes doctor-based primary healthcare, psychological counselling and social services for all employees and contractors

In addition, and in recognition of the potentially close relationship between HIV/Aids in the workplace and local communities, South Deep supports a number of community-based HIV/Aids projects.

In Ghana too, where the national HIV/Aids rate is around 1.5%, employees and contractors have access to a confidential VCT programme which employees receive free of charge. During the year, about 55% of employees of the Ghana operations underwent the VCT programme. Anyone testing positive is provided with free treatment in line with the government's national HIV treatment programme which supplies drugs free of charge. By year-end 2015 Ghana had 19 employees on HAART (2014:22). Gold Fields also implements community-based HIV/Aids programmes in Ghana, including awareness-raising (via radio and trained community health educators) and condom distribution.

### Malaria

Our workforce in Ghana faces a high risk of exposure to Malaria and the Company has a comprehensive Malaria strategy in place, which incorporates education, prevention, prophylaxis and treatment. It also includes spraying accommodation (both on-mine and employee housing within the community), provision of mosquito repellent for workers, support for community health facilities and rapid diagnosis and treatment.

In 2015, 523 employees (2014: 681) tested positive for malaria after 3,104 (2015: 2,686) individuals were tested at both of our mines. None of the treated cases proved fatal. Employees and dependants who live in the mine villages have their houses sprayed as part of our Malaria Vector Control programme. Under this programme a total of 450 company housing units were sprayed in 2015.

## South Deep

In South Deep's evolution 2015 was a critical year and was very much a year of two halves. We started off the year by taking a step back and deciding to fix the basics at the mine before determining the new long-term steady state profile.

As part of this process, we removed the previous long-term production and cost targets to afford the new South Deep management team the time to fix the base and determine the way forward. In the absence of long-term production targets though, we stated that it was our aspiration to get to cash breakeven at the mine by the end of 2016. In addition, we committed to providing a new long-term plan in early 2017.

The first imperative was recruiting a new management team at the mine. To achieve this, we aggressively handpicked a team of leading mechanised mining specialists, mostly from the South African platinum sector.

The new team developed 68 projects to address the issues faced at South Deep. These projects were categorised into seven broad pillars: People; Safety and health; Mechanised fleet; Infrastructure; Mining; Mine design and planning; Systems. In addition, a separate business improvement team was set up to work with the operating management team to implement the range of improvement projects (p74).

In addition to these seven pillars South Deep also strengthened its energy and water teams as well as the Sustainable Development department in view of the increasing risk faced by the mine amid social volatility in the Westonia district, home to the mine (p114).

The team undertook an extensive recruitment drive of the identified critical skills and by the end of 2015 had filled 164 of the 166 skills it was seeking. Importantly, most of the core mining and engineering positions have now been filled.

In addition, in April 2015 South Deep entered a three-year wage agreement with its registered trade unions to ensure that the remuneration packages reflected the specialised mechanised mining skills set required.

During 2015, the fleet was optimised and a total of 24 Category 1 machines were delivered to the mine during the year, with all machines, except one, commissioned before year-end. An additional 24 machines will be acquired during 2016. The maintenance capacity at South Deep also improved during the year with the implementation of a maintenance contract with an Original Equipment Manufacturer (OEM) in Corridor 2, which accounts for 35% of total mining at South Deep. We also commissioned the 93 level workshop, one of the largest underground workshops in South Africa.

During the year, a marked improvement in the physical conditions of the underground infrastructure was achieved across the mine. Further improvements are expected in 2016, particularly with new underground roadway constructions and maintenance projects initiated in Q1 2016.

In 2013, we began a review of the de-stress mining method in collaboration with a team of leading international and local geotechnical experts. A strategic mine design change in the de-stress methodology was adopted in July 2015 with a detailed transition programme

developed to guide the change process. The conversion from low profile vertical mining (2.5 metres vertical height) to high profile vertical mining (5 metres vertical height) commenced in Q3 2015 and is expected to simplify and derisk the mining process. At the end of the year, all de-stress cuts at the mine had been converted to high profile with the exception of corridor 1. About 70% of the mine is now employing high profile de-stress with the transition for the remainder of the mine set to continue until 2018.

More details on South Deep's mining processes and methodologies are on page 87.

There were marked operational and financial improvements in 2015. Comparing the second half with the first half of 2015, production at South Deep increased 64% to 123,000 ounces, which resulted in an 37% decrease in AIC to US\$1,279/oz. In addition, safety improved materially, with TRIFR falling by 8% over the period backfill placed increased 50% to 33,780m<sup>3</sup> and secondary support increased 27% to 614 metres.

While the net cash outflow for the year was R1 billion (US\$80 million), the operating improvements through the year and the higher Rand gold price resulted in the Q4 2015 outflow falling to R57 million.

For 2016 we have provided the following guidance to the market: 257,000 ounces at AISC of R550,000/kg (US\$1,200/oz) and AIC of R575,000/kg (US\$1,250/oz). Capital expenditure is estimated at R1 billion (US\$71 million). We maintain our target of achieving cash breakeven by the end of 2016 at our planning gold price of R500,000/kg.

## 4.3 Business optimisation – Strategic focus areas (continued)

South Deep's base for future growth



Fix the base to support future growth

## Growing a quality portfolio of assets

### Growth strategy

Gold Fields' definition of growth is underpinned by our focus on cash generation. Growing Gold Fields does not necessarily imply a growth in geographical footprint or number of operations. We define growth as 'growth in cash flow per share, and growth in average reserve life.'

Over the past three years we have made significant progress in terms of restructuring our portfolio so we can achieve the targeted growth in the average reserve life per operation and free cash flow per ounce. Gold Fields' portfolio is now characterised by modern, fully mechanised open-pit and underground mining, with diversified production spread across three continents.

When growth is driven by such a strong focus on cash generation, the business may, in certain instances where operations are not strategically aligned or not contributing to our cash generation imperative, dispose of assets in its quest for growth. We have focused on disposing of growth projects that are marginal, located in 'higher-risk' locations and/or are primarily focused on metals other than gold. This has resulted in a short-term reduction in Gold Fields' Mineral Resources – from 113 million ounces in 2013 to 108 million ounces in 2014 and 102 million in 2015 (p82 – 87). In light of our new focus, however, it is not only acceptable but is expected that every new ounce Gold Fields brings into production will directly support the delivery of superior returns to current and future shareholders, and upgrade our existing portfolio.

Of the various growth channels available – greenfields exploration, brownfields exploration, acquisitions, mine construction and targeted portfolio management – Gold Fields has selected those that align with our cash-focused strategy, our core competence and our list of growth criteria. Our strategy has informed the adoption of three growth pillars:

- ▶ Acquisitions: pursuing cash-generative acquisition opportunities that are aligned with Gold Fields' core competencies
- ▶ Near-mine (brownfields) exploration: we ceased all early greenfields exploration activity, which does not add to short- to medium-term cash flow, and shifted to low-risk, near-mine exploration
- ▶ Ongoing active portfolio management to optimise our existing assets

These growth channels emerge as the business follows a process to achieve sustainable growth in cash flow per share and growth in average reserve life. This process, outlined in the diagram on page 76, starts with two courses of action, during which we assess:

1. Potential future acquisitions
2. The current mines and projects in our portfolio of assets

### Assessing potential future acquisitions

In assessing potential acquisitions, Gold Fields looks broadly and globally at potential assets. Once a potential acquisition is identified, it is assessed against the Group's five growth criteria:

- ▶ Quality: All-in Costs
- ▶ Jurisdiction: the right address
- ▶ In-production: cash producing or near-production
- ▶ Life: minimum eight years, ideally 10
- ▶ Scale: large enough to produce US\$20 million – US\$30 million free cash flow annually

The resultant list is tested against additional balance sheet criteria to develop a shortlist of assets for which the Group has both the appetite and capital available for purchase.

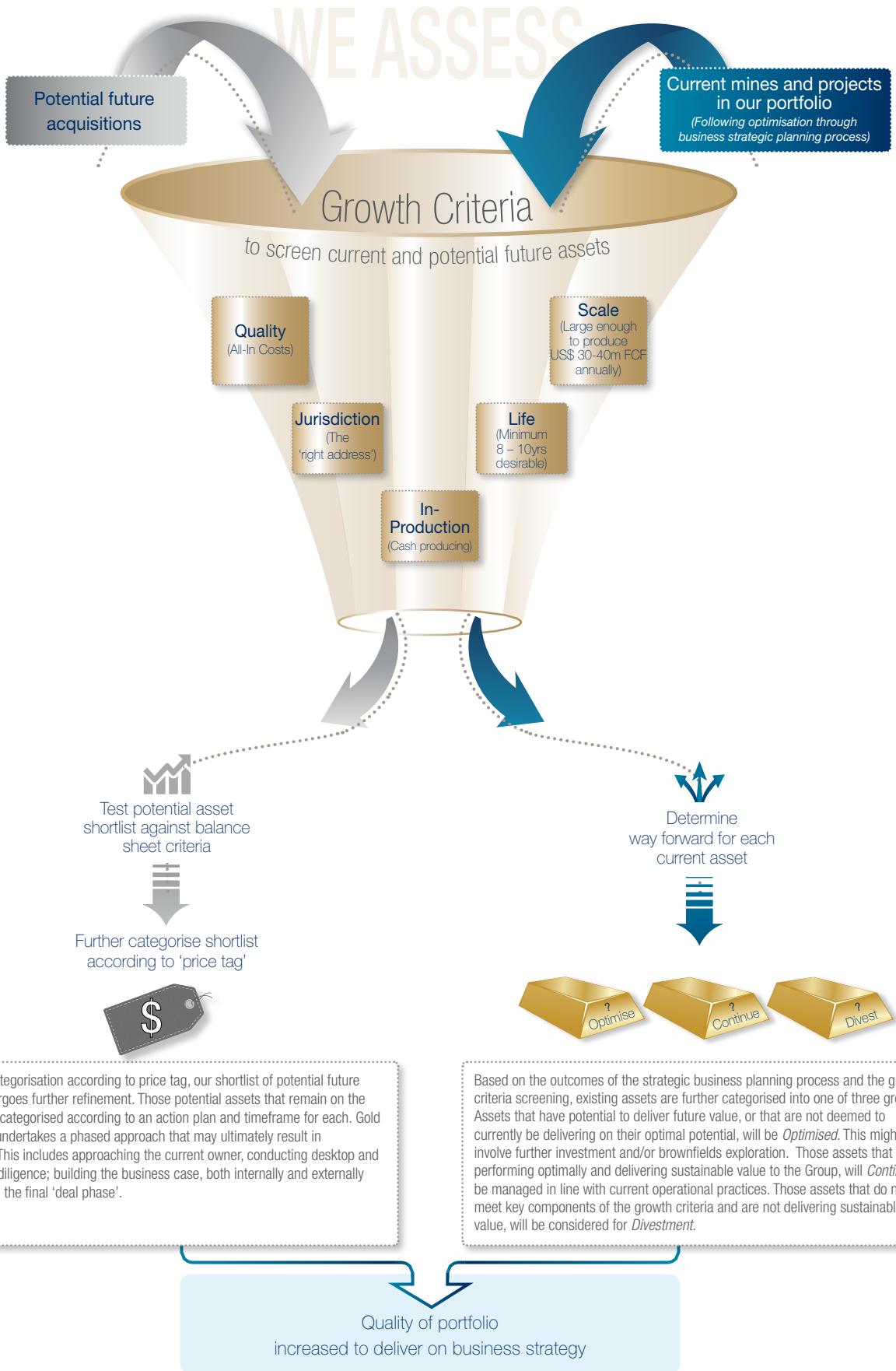
Gold Fields then undertakes a prudent and phased investigation that may ultimately result in acquisition. This process includes approaching the current owner, conducting desktop and on-site due diligence; building the business case, both internally and externally and, if appropriate, entering the final deal phase.

While no major acquisitions have been made over the past two years the difficult market conditions in the industry have made further consolidation in the industry more likely. We will take a disciplined approach to any corporate activity and will model it on our successful US\$262 million acquisition of the Yilgarn South assets from Barrick Gold in October 2013. An acquisition like this will be impossible to replicate in terms of the price we paid for the three mines in the Yilgarn portfolio at the time (Granny Smith, Darlot and Lawlers), but the structural benefits and subsequent management efforts have given us a model to replicate.

The integration of the Yilgarn South assets with our existing mines in Western Australia have:

- ▶ Helped the Australia region expand its cash-generative production to the point where it now contributes 45% of Gold Fields' total produced ounces
- ▶ Paid for themselves by Q3 2015 – a two-year payback that is almost unheard of in the industry

**- Target -**  
 Growth in the average reserve life per operation  
 and free cash flow per ounce





On an annual basis, all assets in our portfolio undergo the Group's Business Strategic Planning process. Multiple scenarios are run for each operation, assessing various operational options for how best to maximise cash flow, life and margin for each operation. After taking into account the Group's capital profile, existing portfolio and current economic environment, a go-forward option is made for each operation, which feeds into our operational planning cycle.

Thereafter, a five-year business plan and a detailed, annual operational plan are developed; looking at all aspects of the operation and tested against the existing investment criteria.

Once this Business Strategic Planning process is complete, we run our current mines and projects through a screening filter of the same five growth criteria used to screen potential future acquisitions (outlined previously). Based on the outcome of this exercise, the Group concludes a way forward for each operation, deciding on how to:

- ▶ Optimise the operation including, *inter alia*, through near-mine (brownfields) exploration
- ▶ Continue running them in line with the current status quo as developed in the previous iteration or
- ▶ Investigate potential divestment

Together, this process of assessing existing assets and potential future assets has the effect of increasing the quality of the portfolio in order to deliver on the business strategy.

## Growth in 2015

### Existing portfolio

During 2015 Gold Fields continued to focus on improving the cash-generation performance of its existing operations. This included:

- ▶ Protecting the commercial sustainability of its mines by avoiding high-grading and investing in ore development on an ongoing basis (p78)
- ▶ Brownfields exploration for life-of-mine extensions (p78)
- ▶ Production and strategic planning based on the delivery of a healthy FCF margin at prevailing gold prices
- ▶ Extensive reviews of two of our more marginal mines – Damang in Ghana and Darlot in Australia – to ensure that they will continue to contribute in the long-term to the growth potential of Gold Fields. These reviews are ongoing
- ▶ Bringing South Deep into a position where it halts cash outflows on a continued basis

To ensure that our business has a strong future, we have made continued exploration and development of our mines' underground and surface ore bodies a strategic priority. These are among the last activities we would cut, even in a sustained low gold price environment and costs associated with maintaining the integrity of our ore bodies is built into the mines' cash flow models.

The strength of our portfolio is evident in the continued free cash flow generation of our international mines in Australia, Ghana and Peru, which collectively generated a net US\$334 million during 2015, despite the average lower US\$ gold price received. Furthermore, our portfolio's FCF margin for 2015 was 8% despite the fact that, at US\$1,140/oz the actual annualised gold price received was 12% below the

US\$1,300/oz planning price. If the price received for the year was normalised to US\$1,300/oz, then the free cash flow margin would have been 15% – in line with our stated target.

At the South Deep mine in South Africa, we are targeting cash breakeven by the end of 2016 with steady-state production metrics to be published early in 2017. Progress at South Deep is discussed on page 73.

### Sales and divestments

As part of stringent evaluation of its assets Gold Fields has, since 2013, disposed of a range of projects that did not meet its long-term cash-generation criteria. In 2014, we disposed of our holdings in the Chucapaca project in Peru, Yanfolila in Mali and Talas in Kyrgyzstan.

In 2015, we continued the programme of disposing of growth assets which did not meet the Group's strategic growth parameters. Gold Fields sold its 51% interest in the Woodjam copper-gold-molybdenum project located in British Columbia (BC), Canada to its joint venture partner in the project, Consolidated Woodjam Copper, as it is not a majority gold project. As payment Gold Fields was issued with new Woodjam Copper shares to take its aggregate holding in Woodjam Copper from 1.1% to 19.9%. As in similar transactions previously, Gold Fields will retain a future royalty in the project, in this case a 2% net smelter return (NSR) royalty over all unencumbered land owned by Woodjam Copper. This ensures that Gold Fields retains some upside to future production in the project.

The table on the next page shows the status of our sales of holdings in key projects over the past two years.

## 4.3 Business optimisation – Strategic focus areas (continued)

### Gold Fields' divestment 2014 – 2015

Project	Year	Buyer	Price	NSR royalty
85% of Yanfoliia (Mali) (85%)	2014	Hummingbird Resources	19.9% in Hummingbird shares	0
51% of Chucapaca (Peru)	2014	Buenaventura	US\$81 million	1.5%
100% of Talas (Kyrgyzstan)	2014	Robust Resources	US\$10 million + Robust shares (since cashed out)	2%
51% of Woodjam project	2015	Consolidated Woodjam Copper	19.1% in Cons Woodjam Copper shares	2%

Gold Fields still retains 100% in the Arctic Platinum Project in Finland, but the project remains up for sale since it is a majority Platinum Group Metals operation.

#### Near-mine exploration

Gold Fields' significant investment in greenfields exploration over the last 15 years has not delivered any new mines. Instead, all new mines brought into the Company's production portfolio have been through acquisition – with Gold Fields adding subsequent value through the optimisation of their operations.

Near-mine exploration therefore offers one of the best opportunities for cash-generative growth for Gold Fields. This is due to synergies offered by:

- ▶ Knowledge of the mine's ore bodies – which supports its ability to identify additional ore bodies within common, nearby geological systems
- ▶ Operational capabilities – including Gold Fields' proven ability to effectively develop and mine orogenic ore bodies
- ▶ Regional and operational infrastructures – including its existing processing spare capacity and regional management teams

As well as adding to Gold Fields' Mineral Resource and Mineral Reserve base, near-mine exploration:

- ▶ Extends the life of the Group's existing mines – whilst maintaining and/or increasing their value
- ▶ Ensures each region can continue to leverage its existing infrastructure

The benefits of effective near-mine exploration can be seen in the historical sustainability of the Agnew and St Ives mines. In 2002, at the time of their acquisition, the mines had a combined Mineral Reserve of 2.9 million ounces. Since then, the mines have produced over 8.5 million ounces – and their combined Mineral Reserves remain mostly unchanged. Gold Fields believes that most of its mines in Australia (which share similar orogenic ore bodies) will be able to repeat this success. Orogenic ore bodies offer a number of advantages in this respect, making this a priority region for near-mine exploration.

#### Orogenic ore bodies

Orogenic ore bodies are an important source of global gold production. While known orogenic reserves characteristically do not extend much further than several

years on any particular deposit, they can have significant vertical and horizontal dimensions and 'grow volumetrically' as extensional exploration and development advances. They can therefore provide mines with long-lived, sustainable gold operations particularly as orogenic ore bodies are well understood geologically and are often large and of good grade.

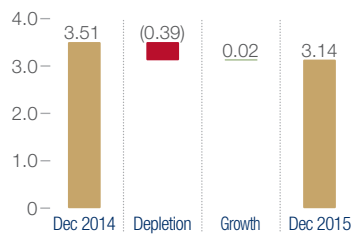
In 2015, Gold Fields raised its total near-mine exploration expenditure by 20% to US\$72 million (2014: US\$60 million) in pursuit of this strategy, the majority of which – US\$68 million (A\$91 million) – was at our four Australian mines. This budget supported a total of 638,766 metres of near-mine drilling (2014: 349,511 metres). For 2016 we have budgeted for US\$65 million in near-mine exploration of which A\$86 million (US\$63 million) will be at our Australian operations.

Much of this activity was focused on the Australia and West Africa regions where the six mines in the Gold Fields portfolio have strong growth potential. Following is a breakdown of the operations' reserve and resource reconciliation for 2015.

**St Ives**

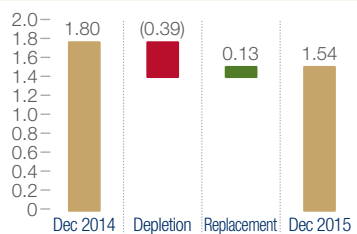
**Mineral Resource reconciliation**

(Gold – Moz)



**Mineral Reserve reconciliation**

(Gold – Moz)



2015 saw a reinvigoration of the St Ives exploration effort with expenditure increased to A\$43 million and 31.3km of drilling completed. This delivered 68,000 ounces of new reserves to the Neptune deposit and 34,000 ounces of new reserves at the North-West Palaeochannel. New resources were defined primarily at Invincible South with an increase of 192,000 ounces, and at Invincible Underground with 134,000 new ounces. Maiden resources were defined at Incredible with 90,000 ounces and at North-West Palaeochannel with 37,000 ounces. Further growth potential exists at all of these projects.

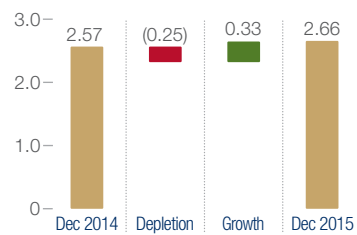
Encouraging results were returned from broad gold intercepts in shallow drilling at the Retribution project. Extensive follow up drilling will be completed during 2016 to further define the gold mineralisation and to define resources.

The exploration strategy at St Ives is to continue to develop the exploration pipeline and define further resources, with a priority on open pit resources. Resources defined during 2015 will be expanded and converted to reserves.

**Agnew**

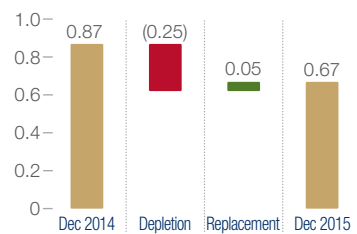
**Mineral Resource reconciliation**

(Gold – Moz)



**Mineral Reserve reconciliation**

(Gold – Moz)



Agnew saw strong focus on growth through exploration in 2015. Exploration expenditure of A\$21 million delivered additional near-mine reserves of 55,000 ounces at Cinderella and total new resources of 367,200 ounces. The resource expansion came primarily from Cinderella with an increase of 116,000 ounces and at New Holland with 107,000 ounces. Maiden resources were reported at Kath (94,500 ounces) and Himitsu (49,700 ounces).

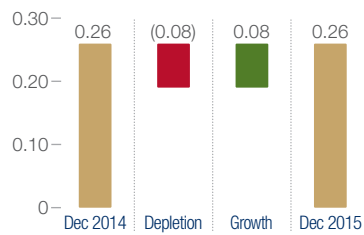
Highly encouraging results were observed from drilling in the Waroonga North project in late 2015. In 2016, resource definition drilling will be accelerated from surface and an underground drill platform established.

The exploration strategy at Agnew is to identify high potential targets outside the current Waroonga – New Holland mining complex but within the tenement package. To this end, high-resolution magnetic data for the Eastern Limb tenements was acquired and analysed during 2015. This information, combined with historic exploration results, has enabled definition of 15 early stage targets to be tested in 2016.

**Darlot**

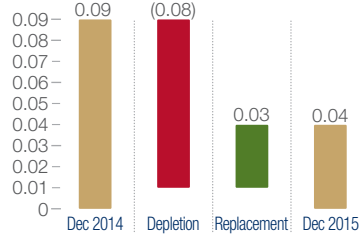
**Mineral Resource reconciliation**

(Gold – Moz)



**Mineral Reserve reconciliation**

(Gold – Moz)



Darlot's 2015 focus was on self-funded exploration programmes to replace production depletion and to extend the life-of-mine.

Key successes in the underground exploration programmes were the initiation of stoping in the Lords South Lower area with positive grade reconciliations. Incremental expansion options have also been identified. Further upside potential exists for Darlot from ongoing in-mine exploration drilling with the Centenary Oval area delivering a small maiden Inferred Resource in 2015.

Further Resource conversion drilling was well advanced by end-2015. In addition there was a significant ramp up of surface exploration activities, inclusive of detailed structural and geophysical targeting, aimed at identifying hidden ore bodies at depth analogous to the Centenary ore body. The increased exploration budget in 2015 focused on both underground and surface prospective areas.

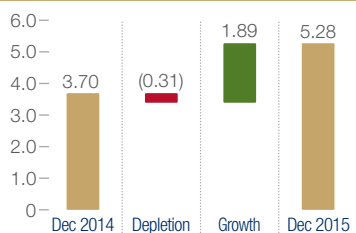
Direct exploration expenditure in 2015 amounted to A\$10 million on underground and surface drilling. A total of 50,278 metres of drilling was completed.

## 4.3 Business optimisation – Strategic focus areas (continued)

### Granny Smith

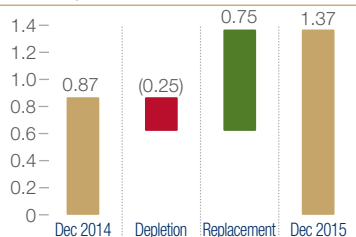
#### Mineral Resource reconciliation

(Gold – Moz)



#### Mineral Reserve reconciliation

(Gold – Moz)



Increased exploration expenditure was directed to co-ordinated work on a range of activities from earliest stage target identification through to the definition of extensions to the Wallaby deposit. A large number of target areas were uncovered that warrant a wide-ranging, early stage air-core drilling project involving 57km of drilling across both the land-based tenements and Lake Carey – a large salt lake beneath which limited exploration work has been conducted to date.

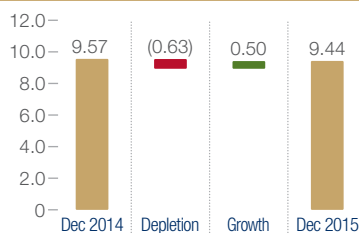
Some targets identified by the early stage work, were tested with 16km of reverse-circulation and diamond drilling. An intense programme, including 87km of extensional and in-fill diamond drilling, targeted the Wallaby ore body to increase the reserves and resources around and ahead of the current production zones.

The exploration programme was successful, revealing promising prospects for further investigation in 2016 and, at Wallaby, resulting in net additions of 1,500,000 ounces in resources and 440,000 ounces in reserves. Overall a post-depletion increase of 43% in resources and 50% in reserves was achieved.

### Tarkwa

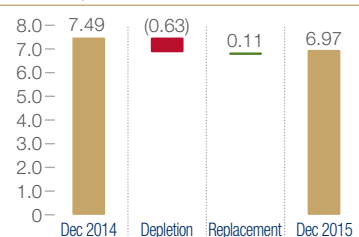
#### Mineral Resource reconciliation

(Gold – Moz)



#### Mineral Reserve reconciliation

(Gold – Moz)



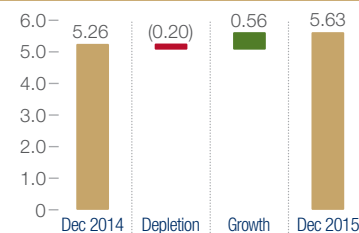
Initial auger and diamond drilling was carried out at Tarkwa during 2015 at a cost of around US\$840,000. This was undertaken in areas identified under the geochemical soil sampling programme, which was carried out in 2014 to explore parts of the concession that previously had limited exploration.

Even though some good results were returned in a number of framework holes, continuity and thickness still need to be confirmed. These areas will be the focus for 2016, for which a budget of US\$1.5 million has been allocated.

### Damang

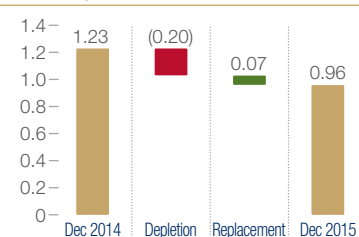
#### Mineral Resource reconciliation

(Gold – Moz)



#### Mineral Reserve reconciliation

(Gold – Moz)



Although no greenfields exploration projects were carried out during 2015, a number of resource infill and extension drilling programmes were conducted at the various pits that encompass the Greater Damang ore body, as well as the Amoanda pit.

The primary objectives of the year's drilling campaign were to:

- Enhance the understanding of the geology and controls on grade distribution in critical areas
- Increase confidence in the resource models
- Add Mineral Resources by the further development of projects with infill drilling

The 2015 phase of reverse circulation and diamond drilling which were completed at the Huni, Saddle, Juno and Juno South pits, have been included in the 2015 Damang resource model. The total exploration expenditure for 2015 was US\$1.7 million.

### Update on growth projects

Two advanced growth projects justified continued inclusion in Gold Fields' growth portfolio. Salares Norte in Chile meets all of the key criteria. It is in 'the right address', offers the right metal and is commercially sustainable. Far Southeast in the Philippines offers a world-class copper-gold deposit with the potential to deliver substantial strategic benefits to the Group in the long term.

#### *Salares Norte, Chile*

The Salares Norte advanced drilling 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 located within a core 900ha concession area – and Gold Fields enjoys an option to purchase two adjoining concessions that would add a further 2,100ha.

In December 2015, Gold Fields updated the project's Mineral Resources, reporting a total 26.8 million tonne Mineral Resource of 3.3 million ounces of gold at a grade of 3.9g/t, and 42.1 million ounces of silver at an average grade of 48.9g/t. We upgraded 31% of Mineral Resources from inferred to indicated status. Preliminary indications, supported by metallurgical test work, suggest Carbon-in-Leach processing could deliver recovery rates of around 90% for gold.

Water security remains a challenge to project execution and operation. While Salares Norte has access to a nearby reservoir with sufficient supplies, the project team is currently meeting with officials from the Water Bureau and the Ministry of National Assets in dealing with the administrative applications that have been submitted. Gold Fields is also in the process of obtaining land access for the project's development and is in negotiation with the state over the land valuation.

Finally, a new Environmental Impact Declaration study was presented to the authorities in January 2016 and is currently under evaluation.

Although there are no indigenous ancestral lands present within the direct project area, the project team is engaged with the surrounding indigenous communities. During 2015, the project made a total of US\$40,000 contribution to social investment projects and will continue supporting these communities during 2016.

Salares Norte offers significant potential in terms of future cash generation, provided that the requested water permits are granted. A project manager has been appointed for Salares Norte overseeing the work of a team of 100 people. A budget of US\$56 million has been made available for further drilling and studies in 2016, following on the US\$17 million spent in 2015.

#### *Far Southeast, Philippines*

The Far Southeast project is a proposed underground mine located in northern Luzon province – 250km north of Manila. The 900 million tonne copper-gold porphyry ore body has grades of approximately 0.7g/t gold and approximately 0.5% copper. At the end of December 2012, it declared an Inferred Mineral Resource of 19.8 million ounces of gold and 9,921Mlb of copper.

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. In late 2015, Gold Fields impaired its investment in Far Southeast by US\$101 million from US\$230 million to US\$129 million, as determined by an evaluation of Lepanto's market value on the Philippine Stock Exchange.

For Gold Fields to obtain a further 20% interest in the project, a Financial or Technical Assistance Agreement (FTAA) is required from the Philippine Government, and is dependent on obtaining the Free, Prior and Informed Consent (FPIC) of the local Kankana-ey indigenous people. In mid-2013 the Kankana-ey people voted in favour of the project and a formal Memorandum of Agreement (MOA) was signed with the Council of Elders in February 2015. The MOA and supporting documentation are currently being considered by the National Commission on Indigenous Peoples (NCIP) before issuance of a formal Certification Precondition, which will complete the FPIC process.

Lepanto and FSGRI jointly applied for the renewal of the mineral tenement in June 2014, to pre-empt the expiration of the initial 25-year term of the mineral tenement in March 2015. In February 2015, Lepanto and FSGRI commenced arbitration proceedings against the Philippine government on whether an FPIC is also required for the renewal of the mineral tenement. In November 2015, the arbitration panel issued an award that FPIC may not be validly imposed as a requirement for the renewal of the mineral tenement and that it should be renewed. This arbitration is now under dispute by the Philippine government. Similarly, conversion of the mineral tenement into an FTAA has been declined at this stage by the mining regulator and FSGRI is appealing the decision.

Amid the legal and administrative delays, the holding costs of this project have been reduced to approximately US\$250,000 per month, related mainly to community engagement work as well as activities to support the permitting process.

Further material development of the project will be dependent on Gold Fields obtaining the majority ownership and receiving an FTAA.

## 4.3 Business optimisation – Strategic focus areas (continued)

### Mineral Resource and Mineral Reserve Statement

Gold Fields' Mineral Resource and Mineral Reserve strategy is focused on realising each assets' full potential through appropriate funding and technical investment in exploration, resource development and reserve growth to support operational flexibility and longer-term sustainability. Key deliverables are cash flow, profitability and return on investment. The strategic priorities are to:

- ▶ Build a quality portfolio of productive mines through active portfolio management
- ▶ Grow through value-accretive acquisitions and near-mine exploration
- ▶ Grow Reserves to increase critical mass and improve flexibility per operation
- ▶ Minimise marginal mining at all operations
- ▶ Divest growth projects that are not fully aligned with our business objectives
- ▶ Manage the environment responsibly
- ▶ Build strong relationship and trust in the communities where we operate

This declaration is based on a Mineral Resource gold price of US\$1,500/oz (A\$1,750/oz; R550,000/kg) and a Mineral Reserve price of US\$1,200/oz (A\$1,500/oz; R500,000/kg) for 2016 and 2017, reverting to US\$1,300/oz (A\$1,550/oz; R500,000/kg) post 2017. The initial gold price (US\$1,200/oz) used for the Mineral Reserve declaration is within the guidelines of the US Securities and Exchange Commission (SEC), as it is lower than the three-year trailing average price of US\$1,280/oz. The copper price used for Mineral Resource estimation is US\$3.5/lb and for Mineral Reserves US\$2.7/lb for 2016 and 2017, reverting to US\$3.0/lb post 2017.

Although the US Dollar gold price used for the Mineral Reserves is close to the current spot price, the Group's focus on strategically positioning the operations to deliver leading AIC, AISC and cash flow margins, underpins their resilience to gold prices periodically trending lower. Business planning, over the next five years, entails the selection of cut-off grades, optimised pit shells, pit staging and stope sequencing with the objective of ensuring that operations are sustainable and cash generative in the short to medium term at lower gold prices. The Group's commitment to ongoing exploration and resource to reserve conversion aims to ensure a quality pipeline of Mineral Reserves that will maintain operational flexibility and assist in sustaining margins at varying gold prices going forward. Annual production alignment to relevant Mineral Reserve mill-head grades shows that, notwithstanding our focus on cash flow margins, we ensure retention of the longer term life-of-mine (LOM) integrity.

This section represents a condensed and consolidated overview of Gold Fields' Mineral Resources and Mineral Reserves. Full details are available in the *Gold Fields' Mineral Resource and Mineral Reserve Supplement* to the IAR. The Supplement contains a comprehensive review of the Group's Mineral Resources and Mineral Reserves as at 31 December 2015, including additional detail on individual operations with respect to location, mine infrastructure, key operating statistics, geology, mining, processing, projects and sustainable development. It is available on the Gold Fields website at [www.goldfields.com/inv\\_rep\\_ar.php](http://www.goldfields.com/inv_rep_ar.php)

### Corporate governance

The reporting of Mineral Resources and Mineral Reserves for Gold Fields operations and projects is undertaken in accordance with the principles and guidelines of the

South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC Code) and Industry Guide 7 for reporting to the SEC. Other relevant international codes are recognised where geographically applicable. The first version of the SAMREC Code was issued in March 2000, updated in 2007 and again amended in July 2009; the JSE subsequently incorporated this new version into its Listings and Reporting Requirements.

The respective operation-based Mineral Resource Managers, Technical Managers and relevant Project Managers have been designated as the Competent Persons in terms of SAMREC and take responsibility for the reporting of Gold Fields Mineral Resources and Mineral Reserves. Corporate governance on the overall regulatory compliance of these figures has been overseen and consolidated by the Gold Fields Group Competent Person, Tim Rowland, who consents to the disclosure of this Mineral Resource and Mineral Reserve Statement. Mr Rowland is Vice-President, Mineral Resource Management and Mine Planning, Pri-Sci Nat No 400122/00, BSc (Hons) Geology, MSc Mineral Exploration, GDE Mining Engineering and FSAIMM, FGSSA and GASA), with 30 years' relevant experience in the mining industry. He is a permanent employee of Gold Fields.

In line with the Group's commitment to sound corporate governance, this statement has been internally reviewed by regional and corporate technical and financial experts and, where applicable, also reviewed by leading independent mining consultancies. This declaration has been found to fulfil the requirements of the relevant reporting codes, and the procedure followed in producing the statement is aligned to the guiding principles of the United States' Sarbanes-Oxley (SOX) Act of 2002.

The headline Mineral Resource and Mineral Reserve Statement as at 31 December 2015 is compared to the 31 December 2014 declaration in the graphs on this page. The Mineral Resource and Mineral Reserve figures are estimates at a point in time, and will be affected by fluctuations in the gold price, US Dollar currency exchange rates, costs, mining permits, changes in legislation and operating factors. All metal commodities are reported separately and not as gold equivalents.

Although all relevant permits may not be finalised and in place at the time of reporting, there is no reason to expect that these will not be granted. However, the length of the approval process for such permits may have an impact on the schedules stated. All financial models are based on current tax regulations at 31 December 2015.

All Mineral Resource and Mineral Reserve figures are on a managed basis unless otherwise stated. Mineral Resources are reported inclusive of Mineral Reserves and stability pillars when appropriate. The estimated volumes are reported in metric tonnes and rounding-off of figures may result in minor computational discrepancies, where this happens, it is not deemed significant.

At 31 December 2015, Gold Fields had total attributable gold and copper Mineral Resources of 102.2 million ounces (December 2014: 108.3 million ounces) and 5,912 million pounds (December 2014: 6,873 million pounds), respectively. Attributable gold and copper Mineral Reserves are 46.1 million ounces (December 2014: 48.1 million ounces) and 532 million pounds (December 2014: 620 million pounds) respectively, net of mined depletion.

Mine design enhancements (including the implementation of a revised regional pillar reconfiguration

at South Deep), the sale of the Woodjam project, as well as mining depletion for the year, were primarily responsible for the year-on-year reduction in managed Mineral Resources (-6.7 million ounces gold), while Mineral Reserves (-2.1 million ounces gold) decreased in line with mining depletion (2.1Moz), while gold lock-up from additional geotechnical pillars at South Deep were counterbalanced by discovery and modelling updates at the various operations.

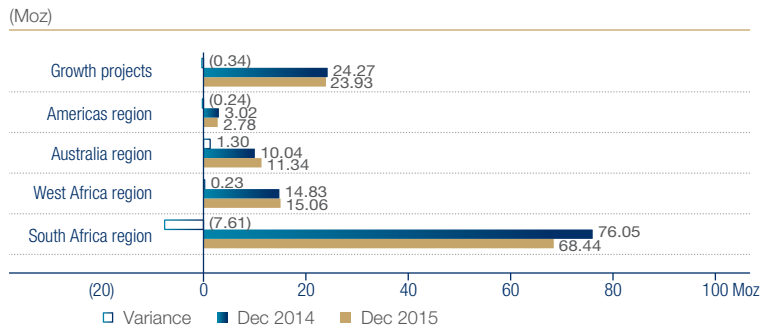
The respective gold and copper Mineral Resource figures (December 2015) are inclusive of all eight operating mines, as well as the Arctic Platinum (APP), Salares Norte and

Far Southeast (FSE) projects. Other commodities and metal by-products that are reported as part of the Mineral Resource (platinum, palladium, nickel and silver) are contained in the *Mineral Resource and Mineral Reserve Supplement*.

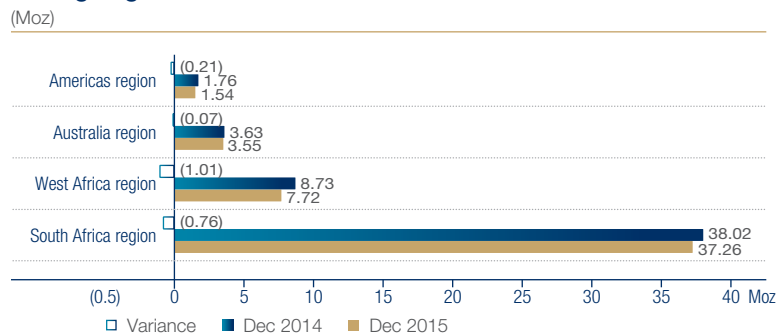
The South Africa region accounts for 74% of the Group's managed gold Mineral Reserves, West Africa 16%, Australia 7% and the Americas 3%.

The South Africa region accounts for 56% of the Group's managed gold Mineral Resources, West Africa 13%, Australia 9%, the Americas 2% and growth projects 20%.

### Managed gold Mineral Resources (Moz)



### Managed gold Mineral Reserves (Moz)



## 4.3 Business optimisation – Strategic focus areas (continued)

### Gold Fields Mineral Resource Statement as at 31 December 2015<sup>1,2</sup>

#### Headline numbers

	Managed Mineral Resources						Attributable ounces	
	31 Dec 2015			31 Dec 2014			31 Dec 2015	31 Dec 2014
	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Gold (Moz)	
<b>Gold only</b>								
Total operating mines –	856.6	3.54	97.609	903.9	3.58	103.925	90.157	96.187
Total projects –	1,127.0	0.66	23.933	1,164.6	0.65	24.271	12.053	12.104
Total operating mines & projects	1,983.5	1.91	121.542	2,068.5	1.93	128.196	102.210	108.291

#### Operational summary

	Managed Mineral Resources						Attributable ounces	
	31 Dec 2015			31 Dec 2014			31 Dec 2015	31 Dec 2014
	Tonnes (Mt)	Grade (g/t)	Gold (Koz)	Tonnes (Mt)	Grade (g/t)	Gold (Koz)	Mineral Resource (Koz)	
<b>Gold</b>								
<b>Australia operations</b>								
Agnew	16.3	5.05	2,656	13.8	5.79	2,570	2,656	2,570
Darlot	1.2	6.51	260	1.1	7.18	263	260	263
Granny Smith	30.4	5.40	5,279	17.4	6.61	3,696	5,279	3,696
St Ives	29.1	3.35	3,141	30.1	3.63	3,508	3,141	3,508
<b>Total Australia region</b>	<b>77.1</b>	<b>4.57</b>	<b>11,336</b>	<b>62.4</b>	<b>5.00</b>	<b>10,037</b>	<b>11,336</b>	<b>10,037</b>
<b>South African operation</b>								
South Deep	331.8	6.41	68,436	382.4	6.19	76,046	62,503	69,804
<b>Total South Africa region</b>	<b>331.8</b>	<b>6.41</b>	<b>68,436</b>	<b>382.4</b>	<b>6.19</b>	<b>76,046</b>	<b>62,503</b>	<b>69,804</b>
<b>Peru operation</b>								
Cerro Corona	109.2	0.79	2,777	115.2	0.81	3,015	2,764	3,001
<b>Total Americas region</b>	<b>109.2</b>	<b>0.79</b>	<b>2,777</b>	<b>115.2</b>	<b>0.81</b>	<b>3,015</b>	<b>2,764</b>	<b>3,001</b>
<b>Ghana operations</b>								
Damang	79.6	2.20	5,625	85.3	1.92	5,260	5,063	4,734
Tarkwa – open pits	192.2	1.38	8,511	193.7	1.39	8,679	7,660	7,811
Tarkwa – surface stocks	66.6	0.43	924	65.0	0.43	889	831	800
<b>Total West Africa region</b>	<b>338.4</b>	<b>1.38</b>	<b>15,060</b>	<b>344.0</b>	<b>1.34</b>	<b>14,827</b>	<b>13,554</b>	<b>13,345</b>
<b>Gold only</b>								
<b>GFL Operations- Total Gold</b>	<b>856.6</b>	<b>3.54</b>	<b>97,609</b>	<b>903.9</b>	<b>3.58</b>	<b>103,925</b>	<b>90,157</b>	<b>96,187</b>

	Tonnes (Mt)	Grade (% Cu)	Copper (Mlbs)	Tonnes (Mt)	Grade (% Cu)	Copper (Mlbs)	Attributable Copper (Mlbs)	
<b>(Peru) – Cerro Corona</b>								
<b>Copper</b>								
Copper (Cu) only	102.0	0.41	914	108.0	0.42	1,006	910	1,001

<sup>1</sup> Managed unless otherwise stated

<sup>2</sup> Refer to the relevant mines for the historic grade and tonnage information



**Gold Fields Mineral Reserve Statement as at 31 December 2015<sup>1,2</sup>****Headline numbers**

	Managed Mineral Reserves						Attributable ounces	
	31 Dec 2015			31 Dec 2014			31 Dec 2015	31 Dec 2014
	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Gold (Moz)	
<b>Gold only</b>								
Total operating mines –	532.6	2.92	50.073	558.1	2.90	52.123	46.064	48.122
Total operating mines & projects	532.8	2.92	50.073	558.1	2.90	52.123	46.064	48.122

**Operational summary**

	Managed Mineral Reserves						Attributable ounces	
	31 Dec 2015			31 Dec 2014			31 Dec 2015	31 Dec 2014
	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Mineral Reserve (Koz)	
<b>Gold</b>								
<b>Australia operations</b>								
Agnew	3.4	6.16	670	3.6	7.44	865	670	865
Darlot	0.2	5.63	34	0.4	7.36	85	34	85
Granny Smith	7.0	5.86	1,310	4.5	6.02	872	1,310	872
St Ives	17.6	2.72	1,542	17.8	3.14	1,803	1,542	1,803
<b>Total Australia region</b>	<b>28.1</b>	<b>3.93</b>	<b>3,555</b>	<b>26.3</b>	<b>4.28</b>	<b>3,625</b>	<b>3,555</b>	<b>3,625</b>
<b>South African operation</b>								
South Deep <sup>3</sup>	218.8	5.30	37,257	223.2	5.30	38,016	34,027	34,896
<b>Total South Africa region</b>	<b>218.8</b>	<b>5.30</b>	<b>37,257</b>	<b>223.2</b>	<b>5.30</b>	<b>38,016</b>	<b>34,027</b>	<b>34,896</b>
<b>Peru operation</b>								
Cerro Corona	53.1	0.90	1,543	60.5	0.90	1,757	1,535	1,749
<b>Total Americas region</b>	<b>53.1</b>	<b>0.90</b>	<b>1,543</b>	<b>60.5</b>	<b>0.90</b>	<b>1,757</b>	<b>1,535</b>	<b>1,749</b>
<b>Ghana operations</b>								
Damang	21.2	1.43	973	25.7	1.49	1,235	876	1,111
Tarkwa – open pits	144.8	1.25	5,822	157.4	1.30	6,601	5,240	5,941
Tarkwa – surface stocks	66.6	0.43	924	65.0	0.43	889	831	800
<b>Total West Africa region</b>	<b>232.8</b>	<b>1.03</b>	<b>7,719</b>	<b>248.1</b>	<b>1.09</b>	<b>8,725</b>	<b>6,947</b>	<b>7,853</b>
<b>Gold only</b>								
<b>Total Gold</b>	<b>532.6</b>	<b>2.92</b>	<b>50,073</b>	<b>558.1</b>	<b>2.90</b>	<b>52,123</b>	<b>46,064</b>	<b>48,122</b>

	Tonnes (Mt)	Grade (% Cu)	Copper (Mlbs)	Tonnes (Mt)	Grade (% Cu)	Copper (Mlbs)	Attributable Copper (Mlbs)	
<b>(Peru) – Cerro Corona</b>								
<b>Copper</b>								
Copper (Cu) only	53.1	0.46	534	60.5	0.47	623	532	620

<sup>1</sup> Managed unless otherwise stated<sup>2</sup> Refer to the relevant mines for the historic grade and tonnage information<sup>3</sup> South Deep Mineral Reserves are reported at head grade inclusive of ore and in-section waste tonnes, while the capital waste component is excluded

## 4.3 Business optimisation – Strategic focus areas (continued)

**Gold Fields Mineral Resource Classification as at 31 December 2015**

	Measured			Indicated			Inferred			Total		
	Mt	Grade (g/t)	Koz	Mt	Grade (g/t)	Koz	Mt	Grade (g/t)	Koz	Mt	Grade (g/t)	Koz
<b>Cerro Corona (Gold only)</b>	82,565	0.86	2,282	23,317	0.58	434	3,335	0.56	60	109,217	0.79	2,777
Agnew	1,136	4.25	155	9,228	5.62	1,667	5,985	4.34	835	16,348	5.05	2,656
Darlot				0,688	6.67	148	0,553	6.31	112	1,241	6.51	260
Granny Smith	2,545	6.57	538	16,398	5.26	2,772	11,446	5.35	1,969	30,389	5.40	5,279
St Ives	4,236	1.97	268	17,905	3.41	1,961	6,981	4.06	912	29,122	3.35	3,141
<b>Total Australia</b>	<b>7,917</b>	<b>3.77</b>	<b>961</b>	<b>44,218</b>	<b>4.61</b>	<b>6,547</b>	<b>24,965</b>	<b>4.77</b>	<b>3,829</b>	<b>77,100</b>	<b>4.57</b>	<b>11,336</b>
<b>South Deep</b>	<b>110,115</b>	<b>3.42</b>	<b>12,123</b>	<b>190,191</b>	<b>7.91</b>	<b>48,339</b>	<b>31,550</b>	<b>7.86</b>	<b>7,974</b>	<b>331,856</b>	<b>6.41</b>	<b>68,436</b>
Damang	13,865	1.52	677	58,076	2.33	4,357	7,665	2.40	591	79,606	2.20	5,625
Tarkwa (excluding stockpiles)	70,439	1.47	3,324	117,029	1.33	5,015	4,752	1.13	172	192,220	1.38	8,511
Tarkwa (including stockpiles)	137,004	0.96	4,247	117,029	1.33	5,015	4,752	1.13	172	258,785	1.13	9,435
<b>Total West Africa</b>	<b>150,869</b>	<b>1.02</b>	<b>4,924</b>	<b>175,105</b>	<b>1.66</b>	<b>9,372</b>	<b>12,417</b>	<b>1.91</b>	<b>763</b>	<b>338,391</b>	<b>1.38</b>	<b>15,060</b>
<b>Total Gold Fields</b>	<b>351,465</b>	<b>1.80</b>	<b>20,290</b>	<b>432,832</b>	<b>4.65</b>	<b>64,692</b>	<b>72,267</b>	<b>5.43</b>	<b>12,626</b>	<b>856,564</b>	<b>3.54</b>	<b>97,609</b>

### Americas

#### Operations

The Americas region has a declared managed gold Mineral Resource of 2.8 million ounces at December 2015 (December 2014: 3.0 million ounces) and a gold Mineral Reserve of 1.5 million ounces (December 2014: 1.8 million ounces). In addition, it has a managed copper Mineral Resource and Mineral Reserve of 914 million pounds (December 2014: 1,006 million pounds) and 534 million pounds (December 2014: 623 million pounds), respectively. The gold equivalent Mineral Resource and Mineral Reserve equates to 4.9 million ounces and 2.8 million ounces respectively. Of this, 99.53% is attributable to Gold Fields. These figures are net of 240,000 ounces of gold and about 79 million pounds of copper from mined depletion in 2015.

#### Salares Norte project

Gold Fields holds a 100% interest in the Salares Norte project, which is situated in the Maricunga Belt, Atacama region, in northern Chile. The project has a Mineral Resource of 26.8Mt, containing 3.3 million ounces gold and 42.1 million ounces

silver, of which approximately 30% is categorised in the Indicated Mineral Resources category.

### Australia

#### Operations

The Australia region has a declared managed gold Mineral Resource of 11.3 million ounces (December 2014: 10.0 million ounces) and a gold Mineral Reserve of 3.6 million ounces (December 2014: 3.6 million ounces) and is 100% attributable to Gold Fields. These figures are net of 1.0 million ounces from mined depletion in 2015, with replacement occurring mostly at the underground Wallaby ore body at Granny Smith. A strong emphasis on exploration funding and project pipeline development from the orogenic style mineralisation in the region continues so as to maintain momentum on discovery and resource development opportunities to supply the next generation of open pit and underground mines.

#### Far Southeast project

Gold Fields holds a 40% interest in the Far Southeast project, which is situated in the mining district of Mankayan in Northern Luzon,

Philippines. An Inferred Mineral Resource of 891.7Mt at 0.7g/t Au and 0.5% Cu for 19.8 million ounces of gold and 9,921Mlb of copper was declared in September 2012 for the Far Southeast deposit – this remains unchanged as at December 2015. This resource is reported within an optimised underground bulk mining shell that is derived using scoping study mining, processing and cost parameters and mining assumes an eventual non-selective, bulk underground mining method.

### South Africa

#### Operations

The South Africa region has a total declared managed gold Mineral Resource of 68.4 million ounces (December 2014: of 76.0 million ounces) and a gold Mineral Reserve of 37.3 million ounces (December 2014: 38.0 million ounces), of which, 91.3% is attributable to Gold Fields, in line with the agreed phase-in participation of Black Economic Empowerment (BEE) partners over 20 years. Ultimately the BEE partners' stake will be 10%. These Mineral Resource and Mineral Reserve figures are net of 198,060<sup>1</sup> ounces from mined depletion during 2015.

<sup>1</sup> Reserves are at a head grade pre the processing recovery

During 2015, the mine successfully concluded studies on a new regional stability pillar configuration, which is endorsed by the South Deep Geotechnical Review Board (GRB). The new regional pillar design has been fully incorporated into the 2015 mine design and scheduling process, which informed the December 2015 Mineral Resource and Mineral Reserve declaration. Due to the reduced spacing between pillars the mine will effectively operate within six mining corridors compared to the previous four.

A new de-stress mining method was developed in conjunction with the GRB to improve safety, increase mining productivities and simplify the overall mining cycle. The conversion from the historical low profile de-stress methodology to the new high profile de-stress mining method, has been rolled out across all the de-stress sections on the mine, with the exception of the mature 951W area, where the current de-stress method will be maintained until completion.

In addition to the new de-stress mining method and revised geotechnical support regime with resultant enhancements to the mine

design layouts, Gold Fields is undertaking a holistic strategic review of the operation with the objective of assessing longer-term optionality at the mine. The intent of this re-basing study is to select the most appropriate business plan for the mine that will guide South Deep forward to ensure delivery as a core franchise asset. This will be communicated to shareholders in early 2017. The current life-of-mine, which forms the anchor to the re-basing project, is estimated to be 80 years.

## West Africa

### Operations

The West Africa region has a declared managed gold Mineral Resource of 15.1 million ounces (December 2014: 14.8 million ounces) and a gold Mineral Reserve of 7.7 million ounces (December 2014: 8.7 million ounces), which are 90% attributable to Gold Fields. These figures are net of 754,000<sup>1</sup> ounces from mined depletion in 2015.

The programme at Damang to assess all relevant options that have the potential to deliver maximum value from the asset to Gold Fields is ongoing and various alternative

investment opportunities will be tabled by mid-year. In the interim, the mine will revert to contractor mining at the end of Q1 2016 in alignment with a reduced short term mining footprint. The Mineral Reserve of 1.0 million ounces is based on the current Operational and LOM plan.

Tarkwa's Mineral Resource of 9.4 million ounces remained fairly steady and the Mineral Reserve of 6.7 million ounces decreased in line with mining depletion and updated resource modelling. On-site exploration opportunities are being considered and tested.

## Projects for disposal

### Arctic Platinum project (APP)

The total Mineral Resource figures for APP (100% attributable to Gold Fields) remain unchanged year-on-year. APP in Finland has a Mineral Resource of 786,000 ounces of gold, 2.4 million ounces of platinum and 9.8 million ounces of palladium – as well as 1,034 million pounds of copper and 438 million pounds of nickel. The project has been put up for sale as part of the commitment to divest growth projects that are not fully aligned with our business objectives.



➤ Drilling at Salares Norte, Chile

## 4.3 Business optimisation – Strategic focus areas (continued)

### Technology and innovation

For the past few years, Gold Fields was a fast adopter of best practice technology rather than a pioneer of research and development in areas such as technology. The cost of developing and applying cutting edge practices was simply too expensive.

However, recent advances in digitisation, automation and mechanisation make it critical that we develop strategies to implement new technologies and partner with IT and OEMs that are leaders in the field. A number of technology companies are working on software advances in mining, which can be grouped under the ‘Big Data’ heading, where data is captured by various sources, digitised, analysed and finally leveraged for better decision making. This has multiple applications for mines, such as geological mapping, geotechnical design, fleet tracking and operator safety. We believe that such technologies will provide us with the edge to fundamentally change our cost structure and improve safety.

We have appointed a new member to our Executive Committee to oversee our progress in this area and to oversee the development of three-year technology and innovation programmes in each of our regions.

Gold Fields has started embracing digital mining, advanced analytics and new software technologies and during 2015, we started working with a number of technology companies at our operations in Australia and South Africa to implement these technologies:

**Mine Vision Systems (MVS)** – In 2007, Gold Fields started work with Carnegie Mellon University (CMU) in the US to develop mining robots. While the robots were ultimately unsuccessful, the robotic vision component from this programme went on to be used in military

applications, oil and gas, heavy industry, autonomous cars and mining. Robotic vision is one of the fastest growing and influential technologies on the world today.

In 2015, Gold Fields asked CMU to spin out the technology for mining, with Gold Fields providing the initial US\$3 million seed funding to create MVS. This gives Gold Fields a 10% share in MVS with a first right access to technology developed by the company.

Since then MVS has put in place 30 non-disclosure agreements with a number of leading software providers and equipment manufacturers and is in early conversations with another 40 interested companies.

MVS provides a system to collect mining data using cameras, sensors mounted on machinery and Light Detection and Radar technology. (Lidar) This data can then be converted into meta-data, compatible with most major mining software providers today. This data is already being used to identify geology, ore fragmentation, convergence and is the basis for geotechnical modelling and machine automation at our mines in Australia. Robotic vision is one of the fastest growing technology areas in the world today.

**GlassTerra** – This Australian start-up technology company, staffed by geo-spatial software engineers and mining experts, is tackling the impending big data challenges facing global mining companies as the amount of digital mining data available grows exponentially.

Gold Fields worked with GlassTerra to run the Ore-X Challenge in August 2015. Ore-X was the world’s first open crowd-sourcing challenge to solve operational problems in the mining industry. Glass Terra made Gold Fields’ 3D geo-spatial data available and asked experts from

around the world to develop an image algorithm that can classify ore material in a gold mine as high, medium or low-grade, or waste.

Gold Fields offered A\$12,500 (US\$9,000) in prizes to the top three entries. Almost 270 contestants participated and the winning algorithms have been built into a geology software package, named Leap Frog, which allows mining data to be converted into easy to use software. This programme has been expanded to collect and evaluate data from new MVS sensors at our St Ives mine.

**Cyest** – This South African technology company is working at our South Deep mine to scientifically determine the capacity of the mine’s full value chain. In addition, the firm is developing an advanced visualisation of South Deep, to convey the complexity of the mining process to internal and external stakeholders. Cyest is using four different systems and solutions at South Deep:

- ▶ Advanced simulation of the sequence of activities and equipment interactions along the underground value chain
- ▶ Validating and improving the mining schedule by modelling the interaction of different mining activities as a function of mine layout, efficiencies and other factors
- ▶ Modelling the link between operational drivers to identify what interventions are needed to achieve the desired financial results
- ▶ Using an advanced gaming platform to create a high fidelity visualisation of the ore body and the associated mining methods

# 5

## Social licence to operate

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› Tailing Storage Facility at Cerro Corona

# 5.1 Social licence to operate – Introduction

If not managed optimally, the environmental and social impacts associated with mining have the potential to affect both the physical environment and our key stakeholders. Sustainable development and social incidents can materially impact Gold Fields' ability to receive or renew its regulatory licences to operate as well as societal acceptance of our operations. The potentially adverse reputational impacts of such incidents are also significant.

In our 2015 Group Performance Scorecard (p12), we have grouped these issues under the topic of Social Licence to Operate, which focus on the following material issues to the business:

- › Environmental stewardship, comprising Energy and Carbon management, Climate change, Water, Waste and Mine Closure
- › Societal acceptance, comprising Stakeholder engagement, Community relations and Shared Value and Human rights

## Environmental stewardship

Gold Fields' approach to environmental management is determined by relevant local legislation and regulations, our sustainable development framework, as well as the ISO 14001 international environmental management standard, the ten principles of the International Council on Mining and Metals (ICMM) and the UN Global Compact. All the Group's operations are certified to ISO 14001.

During 2015, the Group spent US\$35 million on environmental management (2014: US\$27 million). Total gross mine closure liabilities in 2015 were estimated at US\$353 million (2014: US\$391 million) (p103).

In 2014 and 2015, we implemented four new Group-level guidelines, which reflect the sustainable development priorities for Gold Fields and are discussed in detail in this section.

These are:

- › Energy and carbon management (p92)
- › Water management (p97)
- › Mine closure management (p103)
- › Community relations and stakeholder engagement (p108)

A summary of the Group guidelines can be found on the Gold Fields' website at [www.goldfields.com/sus\\_guide.php](http://www.goldfields.com/sus_guide.php). These guidelines will help ensure the application of consistently good environmental management practices across the Group while allowing a degree of regional adaptation to suit local circumstances.

To ensure Group-wide conformance with the guidelines, each operation conducted self-assessments to ascertain the levels of conformance with the guidelines. Action plans have been put in place to address any gaps during 2016.

Operational level grievance mechanisms as well as regular community relations and stakeholder engagement forums allow stakeholders to communicate environmental issues and complaints against the Company.

## Environmental incidents

Gold Fields reports environmental incidents using a Level 1 (most minor) to 5 (most severe) scale<sup>1</sup>. Gold Fields has not recorded any Level 4 or 5 environmental incidents in the past five years thereby achieving our target of zero Level 4 and 5 incidents. During 2015, we did, however, experience 67 Level 2 environmental incidents (2014: 58) and five Level 3 environmental incidents (2014: four). Though we reduced the number of Level 3 incidents, we failed to meet our 2015 target of reducing the number of Level 3 incidents by 50%. These targets (zero Level 4 and 5 incidents and 50% annual reduction in Level 3 incidents) have been retained in 2016. The details of the Level 3 incidents – at our South Deep

mine in South Africa and the Tarkwa mine in Ghana – were as follows:

- › **South Deep, 24 August:** The mine noted ongoing exceedences of the authorised limits for ammonia nitrogen and suspended solids during the daily discharge of treated sewage effluent into the Leeuspruit river (as authorised by South Deep's water use licence) due to two of the aerators not operating. The aerators were repaired
- › **South Deep, 12 October:** The mine noted ongoing exceedences of the authorised limit for ammonia during the daily discharge of treated sewage plant effluent into the Leeuspruit, again due to a non-operational aerator. The aerator was repaired. In order to prevent a recurrence of aerator related issues, the planned maintenance schedule has been enhanced
- › **Tarkwa mine, 16 June:** The left track of an excavator lifted a piece of rock that struck the hydraulic shut-up valve. About 1,544 litres of hydraulic oil was spilled, which was collected and all contaminated material was disposed of in accordance with the mines waste management procedures
- › **Tarkwa mine, 8 October:** Approximately 2,939 litres of oil was spilled when an excavator's hydraulic hose underneath the counter-weight burst. This occurred when the excavator got bogged down while working in a pit. The oil and contaminated material was promptly cleaned up in accordance with the mines waste management procedures and the hose replaced
- › **Tarkwa mine, 8 November:** The right track of an excavator lifted a piece of rock that perforated the fuel tank of the excavator. About 1,200 litres of fuel leaked into the ground and was trapped in an *in-situ* layer of an impermeable dyke. The contaminated soils were then dug up for appropriate disposal

<sup>1</sup> Levels 1 and 2 involve minor incidents or non-conformances, with negligible or short-term limited impact. A Level 3 incident results in limited non-conformance or non-compliance that result in ongoing but limited environmental impact. Level 4 and 5 incidents include major non-conformances or non-compliances, which could result in long-term environmental harm, with company or operation-threatening implications and potential damage to company reputation.

## Group environmental performance

	2015	2014	2013
Environmental incidents (Level 2)	67	58	49
Environmental incidents (Level 3)	5	4	3
Water withdrawal (Mℓ) <sup>1</sup>	35,247	30,207	30,302
Water discharge (Mℓ)	18,492 <sup>2</sup>	11,620	2,526 <sup>8</sup>
Gross closure costs (provisions) (US\$m)	353	391	355
CO <sub>2</sub> emissions (scope 1 and 2) ('000 tonnes) <sup>5,7</sup>	1 323	1 258	1 235
CO <sub>2</sub> emissions (scope 3) ('000 tonnes) <sup>5,7</sup>	431	436	496
Electricity (MWh) <sup>1</sup>	1,322,353	1,338,074	1,382,105
Diesel (TJ) <sup>1</sup>	6,930	6,066	5,509
Carbon emission intensity (tonnes CO <sub>2</sub> -e/oz) <sup>3</sup>	0.59	0.55	0.61
NO <sub>x</sub> , SO <sub>x</sub> and other emissions (tonnes) <sup>4</sup>	21,073	20,084	17,942
Cyanide consumption (tonnes) <sup>6</sup>	7,820	10,660	13,660
Mining waste ('000 tonnes)	167,357	138,522	190,007
Materials ('000 tonnes)	145	144	176

<sup>1</sup> The numbers disclosed only include our operations, as regional and the corporate head offices are not considered to be material

<sup>2</sup> Granny Smith has authorisation to discharge ground water into Lake Carey and the Tarkwa mine treats and discharges the water from its heap leach facilities into the environment. At Damang, water was pumped from the inactive Rex pit, treated via a series of ponds and trenches for pH adjustment before being discharged into an ambient water body

<sup>3</sup> Scope 1 and 2 only

<sup>4</sup> Numbers differ in comparison to what has been reported in previous years due to applying air emission conversion factors that are based on global averages as determined by the Environmental Protection Agency (EPA)

<sup>5</sup> The CO<sub>2</sub> emissions numbers include head offices

<sup>6</sup> Reduction in cyanide consumption is due to campaign milling at St Ives, as well as change in ore type and business improvement initiatives at Tarkwa

<sup>7</sup> Scope 1 emissions are those arising directly from sources managed by the company. Scope 2 emissions are indirect emissions generated in the production of electricity used by the company. Scope 3 emissions arise as a consequence of the activities of the company, such as air travel

<sup>8</sup> No water was discharged at our St Ives and Agnew mines in 2013, while the closure of the South Heap Leach at Tarkwa also led to a drop in water discharged

### Societal acceptance

The success of our business is critically dependent on our relationship with key external stakeholders that determines both our regulatory environment and our social licenses to operate. These stakeholders include governments at a national, regional and local level and, above all, the communities that host our mines. We, therefore, devote considerable resources and energies to securing and maintaining these licences.

This is not merely a compliance-based approach but one that seeks to ensure that we secure the long-term support and acceptance of governments and communities through the sustainable development

of our mines and projects. We believe that we do indeed generate and share significant value for the societies in which we operate.

Our total value distribution, graphically depicted on page 10, details the value creation at Group level as well as in our four countries of operation.

Despite a third year of considerably lower gold price environment, in 2015, Gold Fields continued to distribute a similar level of value (compared with the prior years) to a wide range of stakeholders, including employees, host governments, host communities, businesses and suppliers as well as the providers of capital.

In 2015, our total value distribution – reported according to World Gold Council methodology – was US\$2.401 billion (2014: US\$2.650 billion), with 69% going to businesses and suppliers (2014: 69%), 8% to governments (2014: 7%), 17% to employees (2014: 18%), 5% to capital providers (2014: 5%) and 0.5% on Socio-economic Development (SED) spend (2014: 1%) – mostly in host communities. The slight decline in the total value distribution was largely due to a cutback in spending with business suppliers and partners amid lower operational expenditures.

## 5.2 Social licence to operate – Strategic focus areas

### Energy and carbon

The management of energy use and the related costs is a business imperative for us, even more challenging in the context of declining ore grades, dynamic mining conditions and increasing energy tariffs in our regions. As such, energy management (comprising both electricity and fuel) remains a top priority – in terms of controlling both costs and carbon emissions as well as ensuring security of supply.

Group energy spending as a percentage of operating costs increased to 22% in 2015 (2014: 21%), however this reflected mostly the Group's reduction in operating costs. Actual energy spend declined to US\$312 million (2014: US\$361 million).

While Gold Fields mined more tonnes in 2015 compared to 2014, mining intensity remained flat at 0.07 GJ/tonnes-mined, while our energy intensity per ounce produced increased by 9% to 5.02 GJ/oz from 4.56 GJ/oz in 2014. This was largely due to declining ore grades and the increased use of diesel power generators to ensure security of supply at our Ghanaian operations.

Through energy efficiency and business optimisation initiatives, Group cumulative energy savings reached 777,914GJ between 2012 and 2015. This was a 7% improvement on what we had budgeted for over that period, resulting in US\$30 million in cumulative cost savings and avoidance of 109,000 CO<sub>2</sub>-equivalent tonnes in carbon emissions.

### Integrated Energy and Carbon Management Strategy

Gold Fields integrates energy and carbon management into all aspects of its business through its Integrated Energy and Carbon Management

Strategy. This strategy seeks to ensure energy security; decrease carbon emissions; explore immediate and long-term energy efficiency opportunities, and investigate and implement viable sources of renewable energy.

During 2015, all regions were tasked with developing and implementing five-year energy security plans, with the South Deep and Ghanaian mines being identified as facing the greatest energy-security risks. But these operations also present the most significant opportunities for renewable energy integration.

Gold Fields remains committed to renewable energy solutions at its operations as well as new mine developments. During the year, we initiated a renewable energy project at South Deep (p95) and installed solar power at our head office in Johannesburg to meet half our electricity demand. For all new projects, we have set a target of an average of 20% renewable energy generation for all new mine developments – our Salares Norte project in Chile is actively seeking renewable energy sources as part of its ongoing activities.

Energy and carbon performance, with a strong focus on costs savings, and energy security – including the evaluation of renewable energy – were contained in the balanced scorecards of senior and line management in 2015.

Some of the salient features of the Group's energy and carbon performance during the year were:

- ▶ Diesel consumption rose from 169,000 kℓ in 2014 to 193,000 kℓ amid among others, increased reliance on diesel generators at our Ghanaian mines and declining ore grades at a number of our operations
- ▶ Our diesel spend declined in line with the lower oil prices, while the stronger US Dollar against the

Australian Dollar and the South African Rand resulted in lower power and fuel costs, which are denominated in US Dollars

- ▶ Total electricity consumption for the Group was steady at 1,322,353 MWh compared with 1,338,075 MWh in 2014, reflecting significant energy savings at our Australian mines and a shift towards diesel-generated power at our Ghanaian mines
- ▶ Total energy consumption increased by 7% from 10,465,746 GJ<sup>1</sup> in 2014 to 11,240,369 GJ<sup>1</sup> in 2015 due to higher diesel usage
- ▶ Total carbon emissions increased by 3.4% (59,120 CO<sub>2</sub>-equivalent tonnes) to 1,753,163 CO<sub>2</sub>-equivalent tonnes from 1,694,043 in 2014 CO<sub>2</sub>-equivalent tonnes

With energy accounting for 22% of operating costs, Group-wide, energy efficiencies and energy savings are critical components of our cost savings initiatives. Energy savings from initiatives are recognised for 36 months, after which they become part of the baseline. Rolling energy savings performance targets are set at the beginning of each year, considering operational business plans. For 2016 we are targeting savings of 6% on our initial energy consumption estimate of 10,992 TJ.

Some of the most successful energy savings initiatives during 2015 included:

- ▶ Campaign milling<sup>2</sup> initiative at St Ives and Granny Smith
- ▶ Throughput improvement on the comminution circuit at Damang, which led to improved energy crushing efficiencies
- ▶ Installation of polymer liner material in the milling circuit at Cerro Corona
- ▶ An energy efficiency fans retrofit programme at South Deep

<sup>1</sup> The sum of direct and indirect energy consumption reflects a conversion factor used by Granny Smith and Darlot power stations. If the conversion factor is not applied, total energy consumption was 11,797,812 GJ in 2015 (2014: 10,997,560 GJ).

<sup>2</sup> Campaign milling refers to the situation where the milling process is only in operation when sufficient ore has been provided for the mill to run for a prolonged period. Typically, a mine runs a mill for two weeks then shuts it down for the next two weeks until sufficient ore has been stockpiled.



## Regional and Group energy and carbon performance

	2015	2014	2013 <sup>1</sup>
<b>Diesel consumption (kℓ)</b>			
Americas	13,455 <sup>3</sup>	9,939	13,127
Australia	76,867	75,034	32,709
South Africa	2,457	2,419	4,279
West Africa	99,739	81,423	102,829
Group	192,517	168,815	152,943
<b>Electricity purchased (MWh)</b>			
Americas	145,361	143,441	148,217
Australia	277,521	296,989	234,613
South Africa	484,256	476,767	549,788
West Africa	415,215	420,878	449,487
Group	1,322,353	1,338,075	1,382,106
<b>Total energy consumption (GJ)<sup>2</sup></b>			
Americas	1,012,363	876,812	1,009,890
Australia	3,250,575	3,285,225	2,056,610
South Africa	1,835,467	1,807,258	2,137,095
West Africa	5,141,964	4,496,451	5,365,150
Group	11,240,369	10,465,746	10,568,746
<b>Energy intensity (GJ/oz produced)</b>			
Americas	3.42	2.69	3.19
Australia	3.28	3.18	3.40
South Africa	9.27	9.01	7.07
West Africa	6.82	6.11	6.83
Group	5.02	4.56	5.26
<b>Total energy costs (US\$m)</b>			
Americas	21.08	22.61	26.91
Australia	96.43	130.43	54.25
South Africa	31.00	33.11	40.56
West Africa	163.16	175.14	184.22
Group	311.67	361.29	305.94
<b>Energy costs as % of Opex (%)</b>			
Americas	15	14	17
Australia	18	18	10
South Africa	13	13	13
West Africa	31	32	29
Group	22	21	18
<b>CO<sub>2</sub> emissions (tonnes) (Scope 1 – 3)<sup>4</sup></b>			
Americas	124,030	100,645	110,598
Australia	536,782	537,662	331,803
South Africa	531,078	539,057	611,248
West Africa	561,273	516,679	677,706
Group	1,753,163	1,694,043	1,731,355
<b>Carbon emission intensity (tonnes CO<sub>2</sub> -e/oz)</b>			
Americas	0.27	0.19	0.22
Australia	0.39	0.37	0.37
South Africa	2.73	2.48	1.85
West Africa	0.49	0.43	0.49
Group	0.59	0.55	0.62

<sup>1</sup> Australia numbers exclude the Yilgarn South assets

<sup>2</sup> The sum of direct and indirect energy consumption reflects a conversion factor used by Granny Smith and Darlot power stations. If the conversion factor is not applied, total energy consumption was 11,797,812 GJ in 2015 (2014: 10,997,560 GJ).

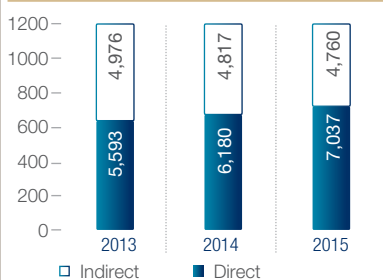
<sup>3</sup> Higher diesel consumption at Cerro Corona is due to increased haulage distances because of the deepening of the pit

<sup>4</sup> Includes head offices

## 5.2 Social licence to operate – Strategic focus areas (continued)

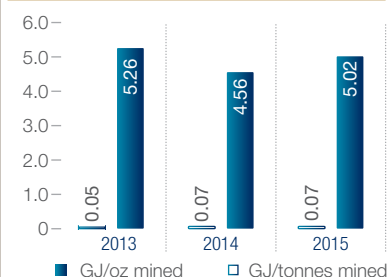
### Group direct and indirect energy consumption

(TJ) (Terajoules)



### Group energy intensity

GJ (Gigajoules)



### Regional energy performance and security

In 2015, we developed regional five-year energy security plans. Our regional operations face varying degrees of energy supply interruptions and tariff volatility. These factors as well as low-carbon energy availabilities were assessed in the development of the energy security plans.

#### Americas region

Energy security is not an issue at our Cerro Corona mine, which has an electricity supply agreement with independent power provider (IPP) Kallpa until 2027. Since Kallpa uses gas as its power-source it also contributes to low carbon intensity.

Cerro Corona has therefore focused on energy management and from 2016 onwards operational energy performance targets will be

correlated with key operational issues such as ore hardness and hauling distances. Energy efficiency initiatives saved the mine US\$3.2 million in 2015.

#### Australia region

Gold Fields' Australian operations have limited, but stable, power supply options due to the remote nature of their operations. Both Agnew and St Ives have power purchasing agreements (PPA) with BHP Nickel West, which will guarantee energy supplies until 2019 and 2023 respectively. The PPAs are based on gas-generated electricity, which will help reduce the carbon intensity of these mines. This is also the case for Darlot.

At Granny Smith all the necessary approvals for the construction of the gas fired power station, along a new gas pipeline being constructed for the nearby Tropicana mine, have been secured. Construction of the gas pipeline has commenced and commissioning of the power station is on track for April 2016. Gold Fields has entered into a 10-year PPA. The cost of the power station is estimated at A\$4.5 million (US\$3.3 million). Once completed we expect savings of around A\$1 million (US\$730,000) a year at current oil prices.

In terms of energy efficiency, the Australian operations performed well with total energy consumption down from 3.29 million GJ in 2014 to 3.24 million GJ, against a target of 3.20 million GJ, led by lower electricity usage. The energy initiatives continued to be focused on the reduction of electricity consumption through campaign milling at Granny Smith and St Ives, as well as the shutdown of the Lawlers processing plant. This led to absolute energy savings of 9.6% against a regional target of 10% for 2015. This saved a cumulative US\$17.1 million in costs.

#### South Africa region

Given the rolling load shedding that South Africa experienced in 2015 and the uncertainties with regard to the electricity prices, South Deep's energy plans aim to build resilience in its power supplies and manage the price risks. Eskom continues to face power supply constraints, due to:

- ▶ Historical under-investment in generating capacity
- ▶ A maintenance backlog on the ageing generation fleet of power stations
- ▶ Delays in the construction of the Medupi and Kusile coal-fired power stations

In this context, Eskom carried out load-shedding across the national grid whenever its available generation capacity could not meet national demand. South Deep has entered into a load-curtailement programme with Eskom. This requires South Deep to reduce demand by up to 25% – depending on the severity of the shortage – for a specified period when the national grid is unable to maintain its load. As South Deep is not yet operating at full capacity, the mine has managed to carry out its principal mining activities without interruption, limiting the impact on production and development during 2015. The mine also uses standby diesel generators for critical periods to ensure the safety of our employees, should load-shedding become unavoidable.

In March 2016, the National Energy Regulator of South Africa (Nersa) granted Eskom a tariff increase of 9.4% for 2016 on top of above-inflation hikes over the previous years.

As part of its five-year Energy Security Plan, South Deep is mitigating the impact of such price rises through further energy efficiency improvements and seeking alternative energy sources. These form part of its five-year energy

security plan, whose implementation commenced early last year, with 25% of the plan completed by the end of the year.

An essential component of the plan is the use of solar power at the mine. After extensive techno-economic studies undertaken by the Richard Branson-sponsored Carbon War Room – Rocky Mountain Institute (CWR-RMI<sup>1</sup>), South Deep last year issued an initial Expression of Interest for a 40MW photovoltaic (PV) on-site solar electricity generation plant. Since then 10 firm proposals were made by IPPs and we expect to make a final decision by mid-2016.

Key requirements of the proposals were:

- ▶ Bidders had to include social initiatives in their proposals that will benefit our host communities
- ▶ The pricing proposal had to trend in line with projected inflation rates and ideally meet Eskom grid price parity (at estimated 2018 tariff levels)
- ▶ Black economic empowerment ownership

South Deep will provide the land for the solar plant and consider entering into a 25-year PPA in accordance with the selection criteria.

At South Deep, energy consumption per tonne processed has improved by 10% between 2014 and 2015, though overall energy consumption was up by 2% to 1.84 million GJ. Electricity accounts for 13% of operating expenses at South Deep, which is below the Group average of 22%. We do not envisage a significant increase in this share as the mine has a large fixed component of energy consumption. Energy efficiency initiatives achieved cost savings at US\$2.1 million in 2015.

### West Africa region

Tarkwa and Damang continue to source their power from the Volta River Authority (VRA) and the Electricity Company of Ghana (ECG). Power supply in Ghana remains severely constrained due to several factors:

- ▶ Hydro-power schemes contribute some 47% of Ghana's power, but with dam levels still dropping rapidly, security of electricity supply remains under threat
- ▶ Delays in the completion of Ghana's planned gas processing plants
- ▶ Reduced gas imports due to growing domestic demand in Nigeria
- ▶ Maintenance challenges at thermal power plants

As a consequence:

- ▶ Daily load-shedding of between 25% – 30% of the mines' electricity consumption was introduced during Q4 2014 and persisted throughout 2015
- ▶ The ECG increased tariffs during the year, while VRA tariffs were reduced as a result of lower prices
- ▶ Power shortages are anticipated to continue in the medium term as electricity demand in Ghana is expected to surpass generation capacity by 2020

To address the current load-shedding requirements, Tarkwa and Damang initiated a number of actions during 2015 as part of their five-year energy security plan:

- ▶ Making more extensive use of diesel generators at Damang, amid relatively lower diesel prices
- ▶ Reaching a power management agreement with the Power Ministry for our Ghanaian mines to, when requested, reduce load at Damang, which, as opposed to Tarkwa, is not running at full capacity.

An important mitigating strategy is a PPA with independent US-based power producer, Genser Energy. Implementation of this plan commenced in 2015 and permits have been received from the Environmental Protection Agency (EPA) for the construction of two Genser-owned gas turbine power plants near the mines. The key features of the Genser agreement are:

- ▶ It is a 20-year PPA for an initial 40MW with 20MW of power being provided from dual-fuel turbines (primarily gas, with an option for coal condensate) at both Tarkwa and Damang. Both Tarkwa's and Damang's 20MW installation are expected to be on-line by the second half of 2016. An additional 20MW is planned for installation at Tarkwa by January 2018
- ▶ The plants will have sufficient on-site gas storage capacity to mitigate any gas supply disruptions. The Genser plants will significantly improve the power supply situation at Tarkwa, which has a total load of 36MW, and Damang, which has a total load of 17MW

By January 2018, Genser should be in a position to provide 100% of the power supply needs at these operations. Surplus power produced by Genser could be wheeled to other consumers should Gold Fields elect to do so. The plants were scheduled to be commissioned in February 2015, but were delayed primarily due to financing delays experienced by Genser.

During 2015, energy spend at our Ghanaian mines remained high at around 35% of operating expenditure – the highest in the Gold Fields Group. This was despite the relatively lower cost of diesel as this was offset by higher statutory fuel levies and a

<sup>1</sup> The CWR was founded in 2009 as a global non-profit organisation by Sir Richard Branson and a group of like-minded entrepreneurs to accelerate the adoption of business solutions that reduce carbon emissions and to advance the low carbon economy. The RMI is an independent non-profit organisation founded in 1982, with the mission of transforming global energy use to create a clean, prosperous, and secure low-carbon future by accelerating the adoption of market-based solutions that cost-effectively shift from fossil fuels to efficiency and renewable energies. CWR merged with the RMI in 2014

## 5.2 Social licence to operate – Strategic focus areas (continued)

downward revision in electricity tariffs. Total energy consumption at both mines rose from 4.49 million GJ in 2014 to 5.14 million GJ in 2015 as diesel consumption surged from 81,423 kℓ to 99,739 kℓ.

Energy efficiency initiatives yielded cumulative savings of 186,514 GJ and emission reductions of 12,354 tonnes of CO<sub>2</sub>, representing cost savings of around US\$7.3 million.

### Energy performance and carbon emission targets

During 2014, each region was required to establish energy and carbon baselines and then set targets for reducing energy consumption and carbon emissions until 2016. From 2016 onwards operational energy performance budgets and targets will also be consolidated at Group level (measured in absolute GJ, GJ/tonne mined, GJ/oz, energy costs (US\$) and absolute carbon emission (tonnes CO<sub>2</sub>-equivalent)).

#### Americas region

In 2015, Cerro Corona did not have energy performance targets, as it finalised the process of linking projections of energy usage to physical operating conditions. Cerro Corona achieved a reduction in electricity intensity of 3.43% (TJ MT processed), representing a 1.97% reduction in absolute electric energy usage (by 145,361 MWh, equivalent to 10.53 TJ) and a 6% increase in diesel intensity (TJ/MT mined), representing a 2.5% increase in diesel usage (by 328 KLT, equivalent to 11.8 TJ). Total energy spend reduced by US\$4.42 million attributable to lower diesel prices. The increase in diesel usage contributed to CO<sub>2</sub> emissions increasing by 0.053% to 77,579 tonnes CO<sub>2</sub>-equivalent. All performance figures are against a baseline year of 2013.

#### Australia region

The energy consumption of our Australian mines decreased by 1.52% to 3.24 TJ (2014: 3.29 TJ), against a target of 3.20 TJ. While

their CO<sub>2</sub> emissions remained relatively flat at 380,611 tonnes CO<sub>2</sub>-equivalent for 2015 (2014: 381,455 tonnes CO<sub>2</sub>-equivalent) the region achieved absolute energy savings of 9.6% against a target of 10%.

#### South Africa region

South Deep is at present exempt from setting performance targets due to being on ramp-up phase.

#### West Africa region

The energy consumption at the Ghanaian mines increased by 12.5% to 5.14 TJ (2014: 4.49 TJ), CO<sub>2</sub> emissions increased by 12.96% to 364,376 tonnes CO<sub>2</sub>-equivalent (2014: 317,142 tonnes CO<sub>2</sub>-equivalent) while absolute energy savings of 6.26% were recorded against a target of 1.7%.

### Carbon emissions

Carbon emissions and climate change represent a material issue for Gold Fields. This is due to:

- ▶ The long-term risks posed by climate change both to the Group's own operations and to wider society
- ▶ Growing efforts to regulate carbon emissions in a range of jurisdictions
- ▶ The taxes increasingly attached by governments to non-renewable energy consumption

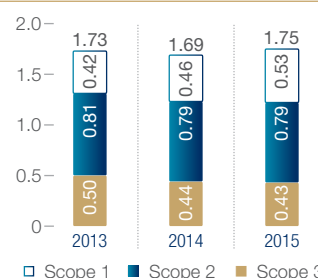
Gold Fields' total Scope 1 – 3 CO<sub>2</sub> emissions during 2015 amounted to 1,753,163 tonnes (2014: 1,694,043 tonnes), leading to a commensurate increase in our emission intensity from 0.55 CO<sub>2</sub>-equivalent tonnes/oz in 2014 to 0.59 CO<sub>2</sub>-equivalent tonnes/oz in 2015.

Emission intensity varies widely from 0.27 CO<sub>2</sub>-equivalent tonnes/oz in Peru, which relies on gas for the bulk of its energy requirements, to 2.73 CO<sub>2</sub>-equivalent tonnes/oz in South Africa, which relies almost exclusively on coal-powered electricity for its energy supplies.

During 2015, Gold Fields' total CO<sub>2</sub> emissions were 3.4% higher than in 2014, largely due to the greater use of diesel at our Ghanaian operations.

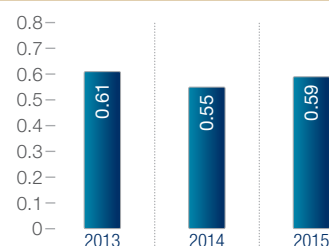
### Group CO<sub>2</sub> emissions – Scope 1, 2, 3

(million tonnes)



### Emission intensity (Scope 1 and 2 only)

(tonnes CO<sub>2</sub>-e/oz)



For 2016 we are looking at intensifying our efforts for improved energy and carbon management through a number of new initiatives, ranging from deepening our understanding of energy drivers at our mines to increased staff awareness and training.

We will continue to investigate opportunities for low carbon energy supplies at a number of our operations, including South Deep (p95), Tarkwa and Damang (p95) as well as Granny Smith. At the latter, construction of a gas plant has begun, which has been registered with the Australian Emissions Reduction Fund (ERF) to achieve savings of around 13,000 CO<sub>2</sub>-equivalent tonnes a year once it is fully operational, which is expected in mid-2016. The ERF credits can be sold with the price depending on ruling auction prices – currently estimated at around A\$12/tonne. Given that the total abatement will be 91,000 tonnes, this could generate revenue of around A\$1 million (US\$730,000) over seven years.

The South Deep energy efficient fans retrofit programme was registered with the UN Clean Development

Mechanism (CDM) in 2013. The programme will enter its first validation stage in 2016.

During 2016, we will also be undertaking risk-based climate change assessments at our operations to identify the ones that are most vulnerable to the impact of climate change and develop short-term and long-term adaptation measures.

### Carbon and climate change reporting

Gold Fields responds on an annual basis to the international Carbon Disclosure Project's (CDP) climate change and water questionnaires. This information - along with that of other organisations - is aggregated to produce the Carbon Disclosure Leadership Index (CDLI) and Carbon Performance Leadership Index (CPLI).

In 2015, Gold Fields achieved a disclosure score of 100% in the CDLI and a performance rating of A- in the CPLI. Both are an improvement on 2014, when the Gold Fields disclosure score was 96% and the CPLI rating a B. The CDP in 2015 also recognised consistent performers between 2008 - 2015. Gold Fields was recognised as one of four companies for being in the CPLI for three or more years and one of seven companies for being in the CDLI for six or more years.

### Global and national climate change initiatives

In the build up to the 2015 Conference of the Parties (COP 21) negotiations in Paris, the ICMM – of which Gold Fields is a member – released a statement in support of the negotiations and clarified the position of the industry with regard to climate change. At the COP 21 negotiations, countries reached a globally binding agreement that would seek to limit global temperature increases over the next few decades.

Key implications for Gold Fields include:

- ▶ Across all Gold Fields operating regions, governments have proposed stringent greenhouse gas emission targets (pre-2020 and in some instances post-2020), with increasing renewable energy and energy efficiency drives

- ▶ The implementation of carbon taxes is likely to be accelerated to enable countries to achieve their emission reduction targets. Gold Fields is facing carbon taxes in South Africa, though their implementation is only likely from 2017 onwards
- ▶ Chile, Peru and Ghana have proposed additional climate adaptation measures, such as reforestation, potentially presenting an opportunity for old mining land re-use
- ▶ All our operations will have to comply with greenhouse gas reporting requirements, such as the Australian National Greenhouse and Energy Reporting (NGER) – already implemented – and the South African National Atmosphere Emissions Inventory Systems (NAEIS), which is not yet legislated.
- ▶ Countries have to review and update their Nationally Determined Commitments every five years from 2020 to report on country progress towards meeting the emission reduction commitments. Companies are expected to align their reporting systems to be able to supply government with the relevant data
- ▶ Carbon pricing and a trading scheme were included in the agreement, though details were not provided

Following the COP 21 Paris Agreement, Gold Fields signed the Paris Pledge for Action to demonstrate our broad support for the worldwide efforts to reduce global carbon emissions. We believe, however, that any regulatory interventions have to be economically sustainable for the industry and any revenues generated used to benefit the environment in general.

We have noted that the South African draft Carbon Tax Bill, which was released in November 2015, is currently targeting only greenhouse gas emissions according to the Intergovernmental Panel on Climate Change methodology. This would not affect South Deep which does not yet produce its own power from fossil fuel-based sources, except through a potential pass through from Eskom, the state's power utility that provides the bulk of the mine's power.

### Water

Water management is a critical long-term issue for the mining industry for a number of reasons:

- ▶ Water is an important vector for the potential spread of pollution (whether as a result of an immediate incident or the gradual build-up and movement of contaminants over time), making it a critical compliance issue as well as being a risk to the environment and human health if not responsibly managed
- ▶ Mining can require large volumes of water and often takes place in locations that are already water-stressed
- ▶ Poor water management can have significant social and political consequences, where local communities are affected by, for example, water scarcity, high levels of agricultural activity and a lack of sufficient water infrastructure

In this context, Gold Fields remains committed to responsible water stewardship, which enables shared benefits for our stakeholders and security of supply for our operations. Key enabling factors to achieve effective water stewardship include publicly reporting our water usage and material water risks and engaging pro-actively with affected stakeholders.

In addition, Gold Fields adopts a catchment-based water management approach. This means understanding the social, cultural, economic and environmental value of water at the catchment scale to identify material water stewardship risks and provide context for operational water management. At an operational level our mines are tasked with managing operational water inputs (both qualitatively and quantitatively) and maximising resource sustainability to achieve operational flexibility and cost savings.

## 5.2 Social licence to operate – Strategic focus areas (continued)

Water withdrawal across the Group increased sharply to 35,247 Mℓ (2014: 30,207 Mℓ), and water withdrawal per ounce produced was up from 13.16 kℓ in 2014 to 15.77 kℓ in 2015. The main reasons for the increased water withdrawal were:

- ▶ Higher usage at South Deep due to the start-up of the water-intensive re-mining process and less water available from the return dams due to the dry summer period
- ▶ Increased water withdrawal at St Ives due to opening up of the Invincible, Neptune and A5 ore bodies
- ▶ Higher levels of dewatering from the Waroonga pit at Agnew as mining at the operation is progressing deeper and into new areas. Furthermore, the dry hot summer of 2015 increased evaporation rates from the processing circuit
- ▶ Water abstraction at Granny Smith by an outside company

Though more water was drawn into the system, water recycled and re-used improved by 1.64% during 2015.

### Water resource management

Each operation implements an Environmental Management System (EMS), through which it assesses, manages, monitors and reports on water use and quality – including discharges, where these occur.

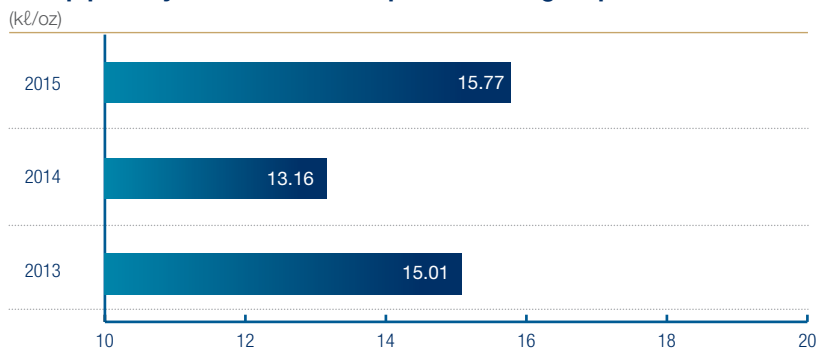
All of Gold Fields' operations are required to have an operational and predictive water balance in place. The water balance is a fundamental tool for understanding current and future water management requirements. Water balances enable decision-making regarding the current and future security of our water supply, as well as other operational and social concerns, such as modelling storm events to determine the impact on dam water levels and the potential risk of unplanned discharges.

Whether mines are water-positive, water-balanced or water-negative depends on a number of dynamic variables. These include climatic variables such as seasonal rainfall and evaporation rates, the volume of water entering underground workings or open pits (e.g. *via* aquifers and surface run-off respectively) and the type of processing employed (e.g. heap leach or Carbon-in-Leach processing).

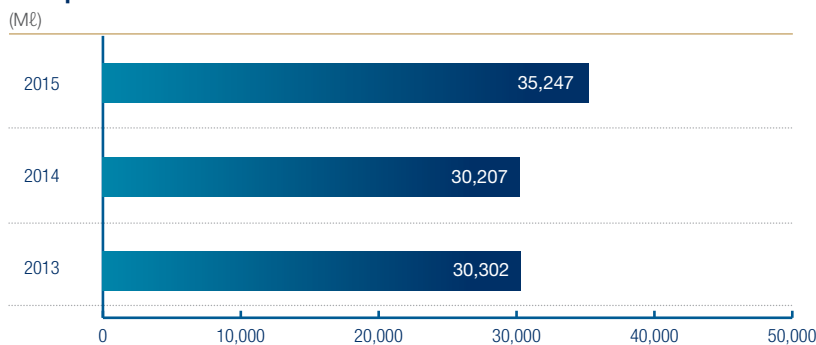
Gold Fields applies the following measures to manage the water balance at its mines and to promote water stewardship:

- ▶ Regional application of the Group water management guideline (a summary is available online at [www.goldfields.com/sus\\_guide.php](http://www.goldfields.com/sus_guide.php)) – including the development and implementation of water management action plans
- ▶ Implementation of physical measures to manage stormwater

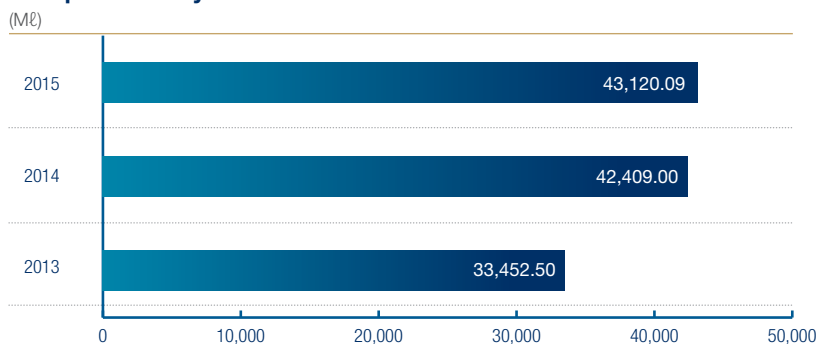
### Group primary water withdrawal per ounce of gold produced



### Group water withdrawal



### Group water recycled/reused



run-off – and keep clean water and mine water separate

- › Maintenance of water containment capacity (including the containment of inflow surges)
- › Water treatment – including reverse osmosis plants
- › Promote water reuse and recycling and conservation initiatives Group-wide

### Water re-use, recycling and conservation

Identifying opportunities to enhance water re-use, recycling and conservation practices at all of Gold Fields operations was a Group balanced scorecard objective for 2015 and beyond. Enhancement of these practices can deliver multiple benefits, including cost savings, reduced impact in water scarce areas, improved regulatory compliance, identification and mitigation of water-related risks, reduction of mine closure liabilities and enhancing Gold Fields' social licence to operate.

Across the Group, 20 initiatives have been identified, of which 16 will be implemented during 2016. The remaining four initiatives require further studies. Some of the most high-profile initiatives include:

- › Use of in-pit tailings storage at our Tarkwa mine instead of building new above-ground tailings storage facilities (TSFs). In-pit tailings storage has a higher potential for recycling and re-use of water than conventional tailings facilities as there is less evaporation and the

tailings density is greater. In addition, the capital costs are likely to be less in terms of both construction and associated community relocation costs. In-pit tailings disposal has been in use at our operations in Australia and recently regulatory approval has been received for in-pit tailings disposal at St Ives

- › Treatment of nitrates in the pit water at Damang mine, using floating mats of plants that absorb the nitrates as nutrients
- › Development of a post-closure water management plan at South Deep, taking into consideration our surrounding mines, whose underground water may enter the mine's underground workings, after they have closed
- › Replacement of the two low-volume underdrainage capture ponds with pumping wells at Cerro Corona, which are more efficient in capturing potential seepage from the TSF
- › Upgrading (where necessary) of all operational water balances to ensure they have dynamic and predictive capabilities by the end of 2016. This is also a Group balanced scorecard objective

### Acid mine drainage

Gold Fields implements a range of measures to prevent or contain Acid Drainage (AD)<sup>1</sup> at its operations and takes effective remedial action where incidents are identified. There were no material cases of AD reported in 2015.

Nonetheless, in the context of broader historical AD legacy issues in the Gauteng area, South Deep has taken a proactive approach to long-term AD management through its comprehensive water management plan. This involves ongoing water monitoring, containment of any AD generation on the old tailings facilities and water-treatment solutions that purify surplus fissure and process water to a potable standard.

In 2015, additional technical studies were initiated as a solution for managing potential AD generation in the underground workings post-closure. Underground AD generation is well managed during the operational phase by ongoing pumping to the surface of the underground water.

Other key water management initiatives implemented in 2015 at South Deep include:

- › Plume mitigation measures have been piloted at the Doornpoort TSF and groundwater extraction wells at the old TSFs
- › Further revegetation of the mine's two historic TSFs, which has further reduced the generation of wind-blown dust to well below the legislated airborne dust level limits
- › The removal of the old South Shaft waste rock dump, which was a potential source of AD and other contamination, is almost complete. Rehabilitation of the footprint area commenced in 2015

<sup>1</sup> AMD or acid rock drainage (ARD), collectively called acid drainage (AD) is formed when certain sulphide minerals in rocks are exposed to oxidising conditions, such as the presence of oxygen, combined with water. AD can occur under natural conditions or as a result of the sulphide minerals that are encountered and exposed to oxidation during mining or during storage in waste rock dumps, ore stockpiles or tailings dams. The acidic water that forms, usually contains iron and other metals if they are contained in the host rock

## 5.2 Social licence to operate – Strategic focus areas (continued)

Cerro Corona's tailings and waste rock facilities were designed to avoid and mitigate the risks of AD. In addition, the mines closure plan contains various strategies, which are updated at least every two years as new technical information becomes available. A more detailed post-closure water management plan will be developed during 2016 to add to the existing body of technical work.

AD issues have also been identified at the Damang mine, however these are confined to one pit. Additional technical studies have been commissioned in 2016 to better manage the AD at mine closure.

Although Gold Fields has commissioned various technical studies to identify the steps required to prevent or mitigate the potentially material AD impacts at its Cerro Corona and South Deep operations, none of these studies has allowed Gold Fields to generate a reliable estimate of the total potential impact on the Group.

Immaterial levels of AD have been identified at the Tarkwa and St Ives mines

### Regional water initiatives

#### *Americas region*

Water security poses a significant long-term challenge at Cerro Corona as the mine operates in a national context of poorly developed water infrastructure, water quality degradation and serious water-related activism at both a local and regional level. Although Cerro Corona has not as yet been materially affected by such activism – this has

had a serious impact on other operators in the Cajamarca region. As such, Cerro Corona has proactively implemented a range of responsible water management initiatives, including:

#### › **Rainwater storage and reuse:**

Rainwater is stored at Cerro Corona's TSF within a closed-circuit water system, treated and reused by the operation. This enhances the mine's water supply, while minimising both the amount of water discharged and the amount of local groundwater abstracted

#### › **Community water supplies:**

Cerro Corona has committed to providing local communities with additional, potable water during the dry season and has completed a number of projects focused on water provision to nearby communities as well as improving existing municipal water systems (p119)

› **Water monitoring:** Cerro Corona works closely with community-elected representatives to monitor water quality and quantity at the Las Tomas spring and authorised discharge points around the operation

Such approaches have - in combination with effective community engagement practices and the generation of shared local value – played a key role in protecting Cerro Corona from the kinds of social tensions affecting other nearby mining operations.

#### *Australia region*

Water security poses a potentially significant challenge for the region's mines – all of which are based in arid areas of Western Australia. During 2015, Gold Fields Australia

proactively ensured that existing supply agreements have been extended to all its operations. This work will continue into 2016.

At St Ives, legal proceedings were commenced in 2014 against Nickel West, operated by BHP Billiton, relating to the continued supply of potable water to the St Ives operations. In early 2015, agreement was reached to settle all outstanding disputes. St Ives has also entered into secondary water supply agreements with other parties (including the Western Australian Water Corporation) to meet its ongoing requirements.

#### *South Africa region*

Water management is a sensitive public issue in South Africa, particular in the Gauteng area (where South Deep is situated), which suffers from the historical environmental legacy of more than a century of intensive, deep-level gold mining. This legacy means that there are high levels of AD in and around Johannesburg – most of it caused by now-defunct companies and operations.

Whilst not contributing to local AD, there are concerns that South Deep's long life will mean that the mine is the 'last man standing' as Gauteng's AD issues become more acute and social and regulatory pressure to act on the issue grows.

South Africa currently finds itself in a drought cycle that is one of the worst in 40 years and which, some experts indicate, could continue for between three to five years. The implementation of water re-use, recycling and conservation practices is therefore particularly critical at the mine.



South Deep compiled a risk-based water scarcity management plan in Q4 2015, which evaluates the key drought related risks and proposes a variety of solutions to ensure that the mine continues to obtain a secure supply of water for its employees and production purposes, while minimising the impact of its water use on the environment and other water users in the catchment. In the short-term these measures include:

- ▶ Considering options to obtain water supplies from neighbouring mines
- ▶ Further improving storage and distribution of recycled water within the South Deep water system
- ▶ Investigating the potential of withdrawing underground water from old workings behind South Deep plugs, that minimise the inflows of water from interconnected mines

The drought has also had an adverse impact on the three reverse osmosis (RO) plants installed at South Deep over the past two years to treat process water and reduce the intake of Rand Water supply. The plants have not been operational since October 2015, due to water shortages.

Before the stoppage, the three plants had treated about 2 – 4 Mℓ/day, thereby of processed water thereby cutting the mine's water purchase costs by an estimated R120,000 to R150,000/month. The RO plants also have the benefit of increasing the overall supply of water for other local users as well as reducing the overall amount of water in the mine's system and the risk of dam overflows during periods of heavy rains. South Deep is currently engaging neighbouring mines to secure more

process water to reactivate the RO plants and reduce intake from the regional water utility.

In 2015, South Deep completed the first phase of its stormwater management plan. This included the construction of concrete channels to separate clean stormwater in the surrounding catchment from water running off the backfill plant area and surrounding areas. This has helped to minimise the risk of unplanned, off-footprint water discharges from the old return water dams during the rainy season due to the diversion of clean stormwater away from the dams. The next phase of the project – the upgrade and lining of the return water dam at the old TSFs – is scheduled to commence in 2017.

South Deep has signed a memorandum of understanding with a US-based technology company to pilot an in-line continuous water monitoring system in 2016 that can provide real-time data on heavy metals and other contaminants. The technology will allow for significantly enhanced response times to any water quality related issues, through an early warning detection system.

#### *West Africa region*

Gold Fields' Ghanaian operations – and Tarkwa in particular – face some challenges on water management, including intense periods of precipitation, particularly during southern Ghana's two rainy seasons, and the significant footprint of the Tarkwa mine, meaning that there is a large watershed to manage.

This footprint includes the extensive surface area of Tarkwa's North and South Heap Leach facilities. While both facilities were closed in 2014,

a significant amount of interaction continues to take place between rainwater and the stacked ore. During 2015, stored contaminated water was being recycled on the South Heap Leach pads temporarily to improve water quality, through the absorption of ions by the vegetative cover (plants) on the heaps.

A second response by the mine was the construction of pipes and the transportation of contaminated water from the South ponds to the North Reverse RO plant, since the South RO plant had been decommissioned to save costs. The rinsing of the North heaps with process water continued. Excess water from the North heaps is treated at the North RO plant and discharged.

The operation of the RO plant, which was established at the behest of Ghana's Environmental Protection Agency, produces concentrated brine, which is being temporarily stored on site in the TSFs. As part of the investigation into the permanent elimination of brine through plant absorption, a 13 hectare test plot of rubber trees (one of the major tree species cultivated in the region) was established at the North Heap Leach facility in Q4 2015, and is being irrigated with brine. This will be monitored in terms of its suitability as a long-term solution for brine management.

In late 2014, Tarkwa submitted its long term decommissioning plan of the North and South heap leach facilities to the regulator (EPA). Subsequent to the submission, the regulator requested technical studies on the end use of the heaps. These studies were completed in 2015 and submitted to the EPA. We are awaiting a formal response.

## 5.2 Social licence to operate – Strategic focus areas (continued)

### Waste and tailings

The most significant output materials of Gold Fields' operations are tailings, waste rock, chemical waste and hydrocarbon waste, all of which are responsibly managed. Gold mining requires large volumes of blasting agents, hydrochloric acid, lime, cyanide, cement and caustic soda (sodium hydroxide), all of which it uses on an ongoing basis. Of these, cyanide represents the most potentially hazardous substance. All Gold Fields' operations, except Cerro Corona, are fully compliant with the requirements of the International Cyanide Management Code (ICMC). Cerro Corona produces ore concentrate and does not require ICMC certification. ICMC certification also extends to Gold Fields' transport providers.

All Gold Fields' operations have tailings management plans in place, including closure and post-closure management plans. All TSFs and associated pipeline and pumping infrastructure are subject to ISO 14001 certification, external tailings audits, as well as regular inspection and formal annual reporting. TSFs are also subject to Group-wide inspection by independent experts at least once every three years - or more frequently where required by local circumstances or regulations.

Gold Fields' last Group-wide TSF audit was conducted in 2014, which included all 15 operational and 10 dormant TSFs, by an independent, expert consultancy and found that all facilities were well-managed and were either already aligned with global good practice, or have plans in place for alignment. The audit found that the Gold Fields TSFs were within the top quartile of industry leading practice in terms of design, operation, and management.

In response to the recent high profile tailings dam failures at Mount Polley (4 August 2014) and Samarco (5 November 2015), which have

resulted in increased scrutiny of the industry's tailings management practices, the ICMM initiated a global review of TSF standards and critical control processes across its member companies. Gold Fields CEO Nick Holland is acting as the CEO sponsor for the review and Gold Fields also chairs the member company working-group. Gold Fields is committed to implementing any additional measures to improve TSF management that may emanate from the review.

To date Gold Fields has applied the following measures at its operations to minimise the risks posed by TSFs to the environment, which include:

- ▶ Pollution containment facilities to capture run-off water from the TSF surfaces, together with solution trenches to capture shallow groundwater seepage
- ▶ Recycling systems to allow the reuse of tailings water in metallurgical processes
- ▶ Monitoring of groundwater plume quality and migration (where applicable) and, where pollution is detected, installing measures to contain plumes
- ▶ Planting vegetation, installing netting and applying chemical suppressants on slope faces to control dust and erosion

More broadly, Gold Fields is taking proactive steps to anticipate constraints relating to the development of future TSFs and the

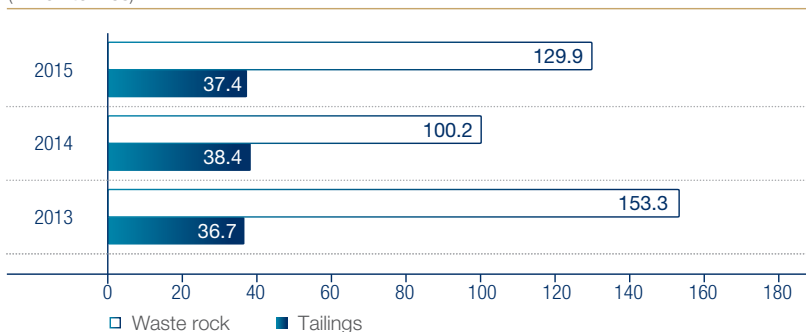
replacement of existing ones. Production activities are dependent on a mine having sufficient TSF capacity. Securing new TSF capacity can involve lengthy permitting processes with local environmental agencies – and can also require negotiations with local communities.

In 2015, the Group took the following steps to ensure that its operations continued to enjoy a sustainable TSF pipeline to support future production:

- ▶ In Australia, our St Ives mine received final environmental approval from the regulator for the proposed Leviathan in-pit tailings facility, which is expected to realise around A\$50 million (US\$37 million) in savings for tailings facility construction and closure liabilities over the life-of-mine. In addition, operational cost reductions are estimated to total up to A\$5 million (US\$3.7 million) a year. Construction started in Q1 2016
- ▶ In 2014, Gold Fields concluded lengthy negotiations with the EPA over the development of future TSFs at Tarkwa. This resulted in Gold Fields securing formal, written permission to raise two of the existing TSFs at Tarkwa (TSF1 and TSF2). During 2015, the wall raise at TSF1 was completed, while construction at TSF2 is nearing completion. These extensions will provide the mine with adequate tailings capacity for the next two years. TSF3 has been earmarked for closure in 2017. These three

### Group mining waste

(million tonnes)



TSFs currently provide the mine with capacity for tailings storage of 13.5 million tonnes per annum

- ▶ To cater for its longer-term production profile Tarkwa has been in talks with the EPA about two new TSFs – TSF5 and TSF6. In late 2015 the mine received verbal go-ahead for site clearing and preparation of TSF5. This work commenced in January 2016, while the environmental review and approval processes are ongoing. TSF 6 is in pre-feasibility stage
- ▶ During 2015, Damang completed the wall raising at the East TSF, which will provide adequate capacity until 2017. A decision to commission the new Far East TSF will depend on the current investigation into the mine's longer-term operational future.
- ▶ At Cerro Corona the Las Tomas spring was relocated to allow for the expansion of the TSF after the relevant approvals were received. An audit by the regulator in August 2015 found that the relocation had been carried out in line with the approvals requirements

Meanwhile, both underground and open-pit operations produce substantial volumes of waste rock. This is kept in managed waste rock dumps, which are subject to comprehensive rehabilitation through the application of cover material, usually topsoil and vegetation, once they are no longer in use.

South Deep commenced the removal of the old South Shaft waste rock dump in early 2015. While tailings output was stable, there was an increase in waste rock across the Group largely due to increased stripping at the Invincible, Neptune and A5 open pits at St Ives.

### Mine closure

The total gross mine closure liability for Gold Fields has decreased by 10% from US\$391 million in 2014 to \$353 million in 2015. This decrease can be attributed to a range of factors including:

- ▶ Significantly weaker Australian Dollar and South African Rand exchange rates against the US Dollar. In Rand terms, the South Deep estimate increased by 17%, however, with the conversion to US Dollars, the amount shows a 10% reduction against the prior year
- ▶ For Gold Fields Australia, in addition to the decrease resulting from the conversion of Australian Dollars to US Dollars, the final closure cost shows a drop of A\$5.6 million as a result of obtaining approval from the regulator to combine the Agnew and Lawlers closure plans

- ▶ A significant decrease at Cerro Corona Mine (US\$6 million), which resulted from a change in methodology for closing the tailings facility

The funding methods used in each region to make provision for the mine closure cost estimates are:

- ▶ Ghana – reclamation bonds underwritten by banks and restricted cash
- ▶ South Africa – contributions into environmental trust funds and guarantees
- ▶ Australia – existing cash resources
- ▶ Peru – bank guarantees

Going forward, Gold Fields is planning to further enhance its integrated approach to mine closure management with a focus on social closure and post-closure water management. The programme is currently being developed and implementation is scheduled for 2016 and 2017.

The percentage contribution to the total gross closure liability per region as well as the percentage secured through the above-listed mechanisms for 2015 are:

Region	% of Group	Total (US\$)	Amount	
			secured (US\$)	% secured
Australia <sup>1</sup>	53%	186,007,171	0	0% <sup>1</sup>
South Africa	8%	28,959,039	28,959,039	100%
West Africa	26%	91,519,303	64,117,934	70%
Americas	13%	46,663,873	20,998,743	38%
<b>Totals</b>	<b>100%</b>	<b>353,149,387</b>	<b>114,075,716</b>	<b>29%</b>

<sup>1</sup> Due to legislative changes in Western Australia that came into effect in July 2014, there is no longer a legal obligation to have unconditional performance bonds in place for mine closure liabilities. 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 and is similar to the US Superfund where monies and interest from the fund will be used to rehabilitate legacy sites or sites that have prematurely closed or been abandoned. Company specific liabilities for active mines are therefore unfunded

## 5.2 Social licence to operate – Strategic focus areas (continued)

### Government relations

As the issuer of mining licences, developers of policy and overseers of regulation, host governments are among Gold Fields' most important stakeholders. Engagement with national governments typically takes place on a collective basis through local chambers of mines. Gold Fields also regularly engages with regional regulatory authorities and local government in its 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.

### Taxation and the maximisation of national mineral benefits

It is natural and right that governments seek to maximise the social benefits that accrue from the extraction of finite natural resources. As a matter of policy Gold Fields fully complies with the fiscal and taxation regulations and laws of the countries it operates in, understanding that these fiscal contributions are critical to fund governments, its employees and public sector infrastructure and projects.

Nonetheless, attempts to secure these benefits through higher levels of targeted taxation can in the long term have the opposite effect. Indeed, the weak commodities market – including the low price of gold – is throwing into sharp focus just how damaging short-term attempts to secure a greater proportion of companies' earnings can be. Mining investment is falling, new growth projects are being left undeveloped and existing projects are facing closure – even without additional fiscal uncertainty. The implications for longer-term national and host community development are obvious.

### Fiscal challenges in Ghana

In Ghana, Gold Fields continues to remain disproportionately exposed to the consequences of a heavier fiscal regime for the mining sector. This follows a range of fiscal measures taken in recent years to address public budgetary challenges. These include:

- › Increased corporate income tax rates and royalties
- › A much reduced capital allowance
- › Increased customs duties on mining items
- › Increased 'stool tax' – a local tax calculated on the size of all exploration and mining lease areas

In 2015 Gold Fields was the second largest corporate contributor to public revenues in Ghana – paying US\$86 million in direct taxes, royalties and dividends. Whilst proud of making such a substantive contribution to national development, this contribution continues to be disproportionate to that of its in-country peers.

These commercial pressures – in combination with the low gold price – are having a direct impact on Gold Fields' expansion plans. In 2014, we reduced our exploration activities in Ghana to near-mine activities only, and the fiscal framework will be a key consideration as we ponder the future of our Damang mine.

Gold Fields continues to constructively engage with the Government of Ghana regarding the potential introduction of an investment framework that would be equally applicable to all gold mining companies. The latest formal engagements with the government in terms of a new investment agreement have been ongoing since late 2014 but have yet to give us a satisfactory level of assurance. A level playing field with a supportive and globally competitive tax regime

would significantly improve fiscal predictability for the Ghanaian mining sector, which is critical for long-term investment planning.

### Royalties in Australia

During 2015, Gold Fields joined with its peers in Western Australia to campaign against a review of the royalties charged on mining, which had been proposed by the government of the state. The campaign, entitled 'Heart of Gold', highlighted the industry's contribution to the economy and job creation. In March 2015, the government announced that there would be no increases to the royalties on gold mining.

### Fiscal uncertainty in South Africa

Gold Fields' operation in South Africa is guided primarily by the Mineral and Petroleum Resources Development Act (MPRDA) of 2002. In 2013 critical amendments to the MPRDA were tabled by the government in the MPRDA Amendment Bill, but the bill was sent back to Parliament for consideration. A change of minister and director general in the Department of Mineral Resources (DMR) in 2015 and differing policy priorities by various government departments, have also created significant uncertainty for current and potential investors.

One of the key requirements of the MPRDA is to facilitate meaningful and substantial participation of Historically Disadvantaged South Africans (HDSAs) in the mining industry. To provide guidance on this open-ended requirement, the Mining Charter, as revised in 2010, was published providing for a range of empowerment actions and a corollary time frame. All mining rights holders (including South Deep as the mining rights holder) are required to submit an annual compliance

assessment to the DMR on progress made against meeting the annual targets in the Charter. Gold Fields continues to comply with this process.

Government had indicated that the Mining Charter would be reviewed during 2015 but a number of important aspects of the Charter remain to be finalised, key of which is the Black Economic Empowerment (BEE) ownership of mining companies and the evaluation of previous BEE transactions carried out by the industry. The Chamber of Mines, representing the vast majority of mining companies in South Africa, has applied to the High Court of South Africa for a declaratory order. The matter was set down for March 15 and 16. For an update see the AFR on page 41.

Consideration of the implementation of the Department of Trade and Industry's amended Codes of Good Practice (CoGP) on the mining industry is also important, specifically alignment between the Mining Charter and the CoGP. In October 2014, the Broad-Based Black Economic Empowerment Act of 2003, as amended (B-BBEE Act), which gives effect to the CoGP, was amended introducing a 'trumping' clause to bring about alignment to the B-BBEE Act for all disparate legislation regulating the measurement of BEE. On 30 October 2015, the DMR announced that the mining industry will be exempt for 12 months from the provisions in the B-BBEE Act, while alignment between the Mining Charter and CoGP is being sought.

The Chamber is also engaging with government directly on the long term sustainability of the industry and a number of other issues confronting the sector. A tripartite forum, called Project Phakisa – comprising industry, government and organised labour – was established during 2015 followed by extensive engagement programmes to map out future growth and empowerment of the South African mining industry.

Gold Fields is fully in support of these efforts and has actively participated in Project Phakisa. However, amid the continued regulatory uncertainty it is difficult to envisage strong investor support for the industry, which is essential if the investment is to be forthcoming to fund an expansion of the sector.



➤ Citrus farming on rehabilitated mine land at Damang

## 5.2 Social licence to operate – Strategic focus areas (continued)

### Mining Charter Scorecard

All mining rights holders (including South Deep as the mining rights holder) are required to submit an annual compliance assessment to the South African Department of Mineral Resources (DMR) on progress made against meeting the annual targets in the Charter.

Gold Fields had submitted its 2012 and 2013 annual assessment report in accordance with these requirements. In early 2015, the DMR requested all mining rights holders (including Gold Fields' South Deep Mine) to re-submit the 2012 and 2013 compliance assessments and submit its 2014 compliance assessment onto an on-line template (designed by the DMR). On 15 March 2016 the DMR extended the statutory deadline for the 2015 submission from 31 March 2016 to 30 April 2016.

Gold Fields submitted the information online as requested.

Amid the absence of new criteria, Gold Fields has updated its Mining Charter performance and compliance in line with this scorecard. The 2015 scorecard follows on this page.

Gold Fields' BEE ownership transactions are detailed on our website at [www.goldfields.co.za/reports/annual\\_report\\_2013/integrated/sec-ethics.php](http://www.goldfields.co.za/reports/annual_report_2013/integrated/sec-ethics.php).

Element	Description
› Reporting	Report on the level of compliance with the Revised Charter for the calendar year
› Ownership	Minimum target for effective HDSA ownership
› Housing and living costs	Conversion and upgrading hostels to attain the occupancy rate of one person per room
	Conversion and upgrading hostels into family units
› Procurement and enterprise development	Procurement spent on BEE entity
› Employment equity	Multi-national suppliers' contribution to the social fund
› Human resources development	Diversification of the workplace to reflect the country's demographics to attain competitiveness
› Mine community development	Developing requisite skills, including support for South Africa-based research and development initiatives intended to develop solutions in exploration, mining, processing, technology, mining, beneficiation as well as environmental conservation.
› Sustainable development and growth	Conduct ethnographic community consultative and collaborative processes to delineate community needs
	› Improvement of the industry's environmental management
› Beneficiation	› Improvement of the industry's mine health and safety performance
	› Utilisation of South African-based research facilities for analysis of samples across the mining value chain
	Contribution towards beneficiation

➤ How we measured up

➤ Mining charter compliance target by 2015

➤ Progress against 2015 mining charter target

Documentary proof of receipt from the DMR	Annually	Target met (Annual Submission)
Meaningful economic participation	26%	35%
Percentage reduction of occupancy rate towards 2015 target	Occupancy rate of one person per room	<b>Hostels:</b> South Deep has completed 100% of the planned hostel upgrades. At the end of December 2015, the occupancy rate averaged one person per room, thus meeting the Mining Charter compliance scorecard target
Percentage conversion of hostels into family units	Family units established	<b>Family units:</b> At the end of 2014 South Deep had completed the establishment of family accommodation at its hostels (100% complete). South Deep remained compliant with this target in 2015.
Capital goods	40%	88%
Services	70%	79%
Consumable goods	50%	84%
Annual spend on procurement from multi-national suppliers	0.5% of procurement value	0%
Top management (Board)	40%	There remains an industry-wide lack of clarity on this requirement in the absence of guidance from the DMR. However, over and above its SLP commitments, South Deep commenced several projects in 2015 focused on enhancing host community procurement, employment and skills development.
Senior management <sup>1</sup>	40%	50%
Middle management	40%	57%
Junior management	40%	54%
Core and critical skills <sup>2</sup>	40%	70%
Human resources development expenditure as a percentage of total annual payroll (excluding mandatory skills development levy)	5%	10.5%
Implement approved community projects	Up-to-date project implementation	As part of South Deep's Social and Labour Plans (SLP), the mine is involved in a number of community development projects focused on infrastructure development, job creation and poverty alleviation, with particular emphasis on enterprise development. Despite being in a loss-making position due to South Deep being in a ramp-up phase, the mine and the South Deep Community and Education Trusts spent a combined R46.4 million on approved socio-economic development projects in 2015. 8% of SED spend (or R3.16 million) was spent on implementation of community projects (LED projects), approved in the SLP. In 2015, 76% of these LED projects were implemented.
➤ Implementation of approved environmental management programmes (EMPs)	100%	100%
➤ Implementation of tripartite action plan (TAP) on health and safety	100%	69%
➤ Percentage of samples in South African facilities	100%	100%
Added production volume contribution to local value addition beyond the baseline	Section 26 of MPRDA (% of above baseline)	Current regulations and guidelines are not clear in relation to the baseline levels and targets. However, Gold Fields has made a capital-intensive investment in our smelting facility at South Deep, which adds significant value to the gold being mined as well as creating jobs. Gold Fields also owns 2,76% of Rand Refinery, which has established the 'Gold Zone'. The aim is for the Gold Zone to become a major hub for precious metals fabrication in South Africa for global export, while at the same time assisting local communities with skills development (including beneficiation). Two socio-economic development projects currently located at the Gold Zone are: (1) The Intsika Project, which provides jewellery design and manufacturing training to formerly unemployed young black women over an 18-month period; and (2) The Ekurhuleni Jewellery Project, which is a Small to Medium Manufacturing Enterprise/Black Economic Empowerment incubator for qualified emerging young black jewellery manufacturers.

<sup>1</sup> Includes members of the SA Regional Executive Committee and the South Deep mine Executive Committee

<sup>2</sup> Core skills include A, B and C graded employees in the miner and artisan categories as well as officials with core skills for mining and/or working in a core mining area(s)

## 5.2 Social licence to operate – Strategic focus areas (continued)

### Community relations and Shared Value

#### Social licence to operate

Many mining companies face increasing pressures over their social licence to operate – i.e. the acceptance or approval of their activities by local stakeholders. Whilst formal permission to operate is ultimately granted by host governments; the practical reality is that many operations also need the permission of host communities and other influential stakeholders to carry out their operations effectively and profitably.

As such, Gold Fields believes it is important to avoid, minimise and manage the negative impacts of its operations on stakeholders while also maximising the positive benefits. In current market conditions – which have the potential to curtail the ability of Gold Fields to deliver local benefits – active stakeholder engagements, in combination with the Company’s Shared Value development approach

(see p117 – 119) is particularly important as it shifts the focus from spending to the delivery of positive social and business impacts.

In this context, Gold Fields actively identifies and engages with the representatives of the following groups on a regular basis - both formally and informally:

- › Central, regional and local government and their agencies
- › Community-based organisations
- › Traditional authorities
- › NGOs
- › Civil society
- › Organised labour
- › Local businesses

Such engagement is guided by:

- › Applicable legislation and regulation
- › The Mining Charter and South Deep’s mandated Social and Labour Plan (SLP)
- › The ICMMs 10 Principles and Community Development Toolkit – and Position Statement on Indigenous Peoples

- › The UN Global Compact’s 10 Principles
- › The AA1000 Stakeholder Engagement Standard

All of our operations are required to implement culturally appropriate stakeholder engagement plans for all stages of the life-of-mine.

It is a Gold Fields requirement that all mines establish mechanisms through which communities can voice their grievances and complaints about the Group, its behaviour or that of its employees on social and environmental issues, and have these issues assessed and resolved.

Our community policy, charter and our community relations and stakeholder engagement guidelines can be found at [https://www.goldfields.com/sus\\_society.php](https://www.goldfields.com/sus_society.php)

### Gold Fields Social Performance Framework





### Socio-economic development (SED) spend

Gold Fields recognises that not all of the value it creates at a national level through royalties and taxes benefits its host communities. To address this deficit – and to maintain its social licence to operate – the Group focuses on SED initiatives and Shared Value projects in its host communities. Shared Value projects (p118 – 119) are sustainable projects that support Gold Fields’ own business objectives, whilst also generating positive socio-economic impacts for host communities by addressing their priority needs of employment, skills and enterprise development as well as environmental rehabilitation and water supplies.

At first glance, the spending on SED programmes – US\$14 million in 2015 – appears small given that this reflects our traditional community social investments (CSI) spend in host communities. However, there is no doubt that a significant amount of our salaries and wages paid to employees finds their way back into these communities. A significant part of our spending is also with local

business suppliers and contractors. Gold Fields is increasingly seeking to ensure employment and procurement is channelled to local communities and as a result stimulate local employment with specific targets being developed by all of our operations over the next year.

SED and wider community spend is focused on the delivery of benefits to host and labour sending communities. These include:

- › Host community employment
- › Host community procurement
- › Skills development
- › Educational investment
- › Health investment
- › Infrastructure support

Details of these initiatives in each region follow on pages 110 – 119.

### Host community employment

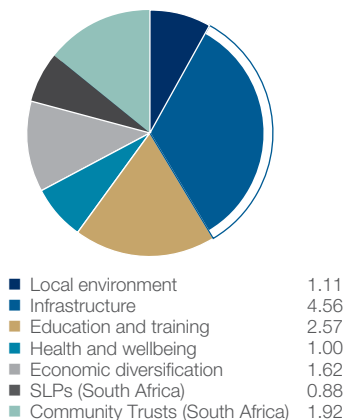
Gold Fields is committed to employing host community members at all its operations – where this is feasible. By doing so, we are able to align the interests of host communities to those of our mines, maximise local value generation and build up its local skills pools.

Nevertheless, Gold Fields’ ability to recruit such workers can be constrained by the limited availability of skills at the host community-level in the first place – underlining the need for Gold Fields to also support local education and skills development.

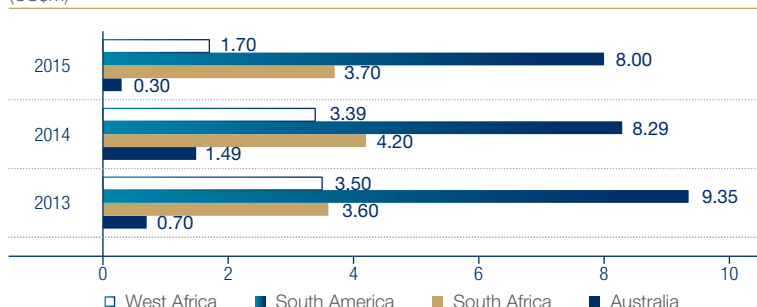
In South Deep, for example, many of our workers recruited for lower skilled jobs have been recruited from the mine’s community-focused Adult Basic Education and Training courses. Similarly, at Cerro Corona in Peru, local employees were employed as part of our early and successful efforts to integrate members of the host communities into our workforce.

The number of host community members – including both employees and contractors – working at each of Gold Fields’ regions is set out on the next page. All our operations have been tasked with developing plans that encourage host community procurement and employment as well as setting three-year targets in 2016.

**SED contributions by type 2015**  
(US\$m)



**SED contributions by region 2013 – 2015**  
(US\$m)



## 5.2 Social licence to operate – Strategic focus areas (continued)

### Host community procurement

Where possible, Gold Fields seeks to procure goods and services from its countries of operation, and, where feasible, its host communities. This serves to:

- ▶ Enhance the national and local supply base, which is vitally important given the remote nature of some mines
- ▶ Generate employment opportunities for local people

Of the total 2015 procurement expenditure, US\$1.27 billion, or 76%, was spent on businesses based in countries where Gold Fields has operations (2014: US\$1.41 billion / 76%).

Within this figure, US\$514 million, or 35% of total expenditure, was spent on suppliers and contractors from mine host communities (2014: US\$600 million / 39%). Host procurement numbers are dominated by our Australian operations – US\$439 million in 2015 – as the entire region of Western Australia is classified as a host community due to the extremely remote nature of this region and the fact that many employees fly into the operations from Perth.

In addition, Gold Fields works with communities and governments to develop broader, more diversified local economies – primarily by helping local people start and consolidate their own businesses.

Three-year local procurement and employment strategies and plans for South Africa, Ghana and Peru will be developed in 2016 to support the delivery of targets to be set at the same time. The targets will also be included in the balanced scorecards of managers responsible for their implementation.

### Skills development

Gold Fields recognises that skills development is critical for integrating members of its host communities into its workforce or that of its suppliers. Similarly, Gold Fields supports the development of small- and medium-sized local businesses by helping community members attend courses in practical business skills to achieve portable skills as well as business law, financial management, marketing, ethics and entrepreneurship.

### Host community employment and procurement

Region	Number of employees from host community (as a % of total employees)		Number of workforce <sup>2</sup> from host community (as a % of total workforce)	
	2015	2014	2015	2014
Peru	19%	22%	29%	24%
Ghana	46%	48%	67%	66%
Australia <sup>1</sup>	89%	91%	90%	94%
South Deep	48%	46%	50%	47%
Group	51%	52%	59%	57%

Region	Local (in country) procurement			Host community procurement		
	2015	2014	2013 <sup>3</sup>	2015	2014	2013 <sup>3</sup>
Peru	87%	88%	91%	7%	5%	6%
Ghana	64%	72%	68%	9%	6%	6%
Australia <sup>1</sup>	97%	99%	99%	66%	69%	72%
South Deep	100%	100%	100%	10%	9%	4%
Group	85%	91%	86%	35%	39%	31%

<sup>1</sup> Host communities are those communities living in settlements within an operation's direct area of influence. For Gold Fields Australian operations, Western Australia is classified as a host community due to the extremely remote nature of this region and the fact that many employees fly into the operations from Perth. Hence the high host community employment percentages relative to the other regions.

<sup>2</sup> Workforce is the total of employees and contractors

<sup>3</sup> Excludes Yilgarn South assets

## Education investment

Gold Fields recognises that education is critical for the social and economic development of its host communities, the improvement of its operating environments and the long-term integration of host community members into its workforce. Relevant educational initiatives range from equipping early learning centres and schools, extra lessons and bridging programmes for students, teacher training and bursaries for students to the sponsorship of mining universities.

## Health investment

Many of Gold Fields workers are drawn from host communities, resulting in a high degree of interaction between the workforce and the local community. The promotion of community health is therefore not only important from the perspective of local socio-economic development - but also employee wellbeing and operational continuity. For example, at Tarkwa Gold Fields manages a local hospital that assists community members in addition to employees, while the mine also sponsors public health programmes in adjacent communities.

## Infrastructure support

Some of Gold Fields' areas of operation suffer from a severe lack of infrastructure, such as roads, electricity supply and social services, including schools and medical facilities. This not only impacts the development of host communities but can also, in certain cases, impact Gold Fields' own operations. As such, infrastructure development represents a key area of focus. In 2015, Gold Fields spent a total of US\$4.5 million on host community infrastructure initiatives, the largest slice of its SED spend.

## Regional programmes

### Americas region

Despite ongoing friction between local communities and other mining operators in the Cajamarca region, Gold Fields' Cerro Corona mine so far remains largely unaffected. This is mainly due to the strength of the mine's relations with the local community, which is supported by:

- ▶ Ongoing implementation of a well-established engagement framework with the communities in Hualgayoc that helps identify and address host community development priorities, including the availability of potable water, management of our environmental and social impacts and employment generation
- ▶ Gold Fields' participation in the 'Mesa de Dialogo y Concertacion de Hualgayoc' (a community-based, multi-stakeholder roundtable focused on regional development projects)
- ▶ Joint water monitoring with the host community, to provide assurance around the mine's water impacts – a key focus point for communities in conflict with other mining operators in the area
- ▶ Support for the organisations responsible for the management of the Tingo and Maygasbamba rivers to improve irrigation infrastructure
- ▶ Visible benefits to the host community through the employment of community residents and targeted SED projects

The most critical community projects in Cerro Corona are linked to the communities' top priorities and include water provision for surrounding communities, job creation and local supplier development and houses at risk of collapse. Cerro Corona's water management programme – which is also a Shared Value project (p119) – aims to bring drinking water to more than 90% of the families of Hualgayoc by 2017.

The following projects in 2015 supported this ambition:

- ▶ Towards the end of 2015, Cerro Corona started the construction of the Coymolache drinking water system to provide water connections to 35 families. The project is scheduled for completion in April 2016
- ▶ The completion of the rehabilitation of the main infrastructure that provides potable water to Hualgayoc City
- ▶ The completion of the first phase of the Cuadratura drinking water system, benefiting 85 families
- ▶ The replacement of 18 km of local water pipeline systems, including enhancement of water collection points. This water pipeline system will benefit 18 hamlets in the area and will cost an estimated US\$4.5 million. Work started in September 2015 and is scheduled for completion in October 2016

Other key SED projects undertaken by Cerro Corona during 2015 included:

- ▶ Gold Fields provided financial and practical support to 813 small farmers in the district of Hualgayoc to plant 614 pastures. These pastures will assist with increasing milk sales in 2016 as the dairy industry is the second biggest economic activity in the Hualgayoc district after mining
- ▶ Gold Fields embarked on a voluntary programme to reconstruct five houses at risk of collapse in Hualgayoc City. Work on another four houses is scheduled for 2016 to prevent them from collapsing
- ▶ Construction and equipping of the Hualgayoc Health Centre was completed by Gold Fields in 2015 at a total cost of US\$2.4 million. It is managed by the regional government and considered one of the most modern health facilities in the region

## 5.2 Social licence to operate – Strategic focus areas (continued)

### Australia region

The remote location of Gold Fields' mines in Australia – as well as strong local socio-economic conditions – mean that stakeholder engagement, which is driven by a current stakeholder engagement plan, is largely focused on local indigenous groups. This includes engagement around native titles on Gold Fields' licence areas, land access for near-mine drilling and the preservation of indigenous heritage.

The Gold Fields Australia Foundation is responsible for investments in community projects and during 2015 spent A\$300,000 (US\$216,000) in supporting a number of initiatives in support of indigenous groups, including bursaries to children from these communities

Under Gold Fields' Community Policy, the Company is committed to working to obtain the consent of indigenous peoples for new projects (and changes to existing projects) – where they are located on lands traditionally owned by or under customary use of indigenous peoples – and that are likely to have significant adverse impacts on indigenous peoples.

Gold Fields' St Ives mine is currently involved in a native title claim made by the Ngadju People for the recognition of their Native Title rights over a large parcel of land, including tenements held by St Ives. Details of the legal case are on page 40 of the AFR.

### West Africa region

In light of local socio-economic realities at our Ghanaian operations, community relations are a major focus for the Damang and Tarkwa mines. However, the mines' lower production over the past two years has resulted in lower levels of funding for the Gold Fields Ghana Foundation (Gold Fields' main SED vehicle in the country, which receives US\$1 per ounce of gold sold and 1% of pre-tax profits).

As a result, Gold Fields has been carrying out targeted engagement with key host community stakeholders to minimise the impacts on both the affected individuals themselves and host communities more broadly. Furthermore, relationship assessment work – similar to that used at our South Deep mine (p114) – was completed in 2015 and its findings and mitigating actions implemented in 2016.

This is in addition to ongoing engagement that took place through the mines' well-established consultation channels, including their:

- › Broad-based mine consultative committees
- › Formalised, regular engagement with local chiefs
- › Regular community committee meetings
- › Direct community forums
- › Continual informal engagement

Key community issues in 2015 included:

- › Compensation of farmers at Kottraverchy, Tarkwa: Despite 400 farmers previously accepting crop compensation, in 2014 a small group of farmers challenged the value of the compensation. Gold Fields is participating in a mediation process with the farmers, overseen by the Environmental Protection Agency (EPA) and an independent evaluator has been appointed
- › Relocation of Ainoo residents, Damang: After raising concerns about the health and safety implications of their proximity to the Lima South Pit, six residents were successfully rehoused at a cost of around US\$500,000. Our actions were guided by the Gold Fields practice guide on resettlement as well as guidelines developed by the World Bank's International Finance Corporation

The Gold Fields Ghana Foundation – which has Company and external trustees – spent just over US\$1 million on projects during 2015. The most important ones were:

- › An information technology and early childhood development centre at New Atuabo
- › Artisan training and the supply of tools at Tarkwa
- › Additional classrooms at Gold Fields supported schools near Tarkwa
- › Continuation of our scholar bursary schemes for 166 pupils at Tarkwa and 42 pupils at Damang

**South Africa region**

Under the 2002 Mineral and Petroleum Resources Development Act, mining companies must submit a SLP as a prerequisite for the granting of mining or production rights. Each SLP requires the Company in question to implement, amongst others:

- ▶ Employee development programmes, with an emphasis on BEE
- ▶ Local Economic Development (LED) programmes – with a focus on host communities and labour-sending areas
- ▶ Employee accommodation and housing programmes (p131)

As such, the LED element of the SLP provides the regulatory framework for Gold Fields’ engagement with host community stakeholders in South Africa. Since the 2010 Mining Charter took effect Gold Fields has substantially complied with its requirements including those agreed to under the 2010 approved SLP and the 2013 SLP, yet to be approved.

However, in 2014, amid continued social unrest and rising poverty and unemployment levels in the

Westonaria municipality – home to our South Deep mine – Gold Fields set out to assess and understand the community expectations amid the ever-growing risk that the social volatility will spread to the mine.

South Deep’s journey from compliance to its future focus is outlined in the infographic on the following two pages.

The use of the Relational Proximity Indicator tool to measure the strength of community relationships at South Deep has been ongoing since Q2 2014 and all 10 of our host communities in Westonaria were assessed by the end of 2015. These assessments have revealed a significant gap in South Deep’s community investment programme and its ability to positively impact community perceptions. The community raised unemployment, education, skills development and the mining companies’ social and economic obligations as the key issues that need to be addressed.

With a more comprehensive understanding of the risk, community needs and community perceptions, last year South Deep’s approach

shifted materially from one focused on compliance to one focused on good practice. The South Deep community relations team was strengthened and a range of new strategies, programmes and projects have been developed and implemented, as outlined in the infographic. These initiatives were undertaken in addition to the SLP and Shared Value projects (p118) already undertaken by South Deep:

**Gold Fields and Sibanye Gold Alliance**

An alliance was formed in 2015 between Gold Fields and Sibanye Gold, the other mining house hosted by the Westonaria communities, to join forces building sustainable host communities. Service providers were appointed during Phase 1 of a programme with the aim of building an agricultural economy organised by the community itself. An eight week workshop was held as a part of Phase 1 that established a number of enterprises in agriculture, sewing, construction, landscaping, security services and waste recycling, creating around 200 jobs in the area. The second phase commenced early in 2016.

*Continued on page 116*



▶ Sewing project supported by South Deep

## 5.2 Social licence to operate – Strategic focus areas (continued)

### South Deep's Social Licence to Operate journey

#### Focus on compliance

##### Compliance with regulation rather than community expectations

South Deep focuses on implementing employee and local economic development plans in host communities and labour-sending areas, in line with the requirements of the SLP

#### Community Investments

US\$3m (R29m) construction of 163 new homes in Westonaria and Poortjie



US\$200,000 (R2,4m) opening a new bakery run by community members



US\$340,000 (R3,5m) restoration of the Healdtown College in the Eastern Cape

- US\$100,000 (R1,1m) invested in Thusanang Community Clinic
- Planning and infrastructure for the Simunye High School upgrade

#### Socio-economic realities

Despite the investment by South Deep and other mining companies, Westonaria continues to be characterised by:

- High youth unemployment
- Poverty
- Poor delivery of social services
- Social unrest



#### Assessment and understanding

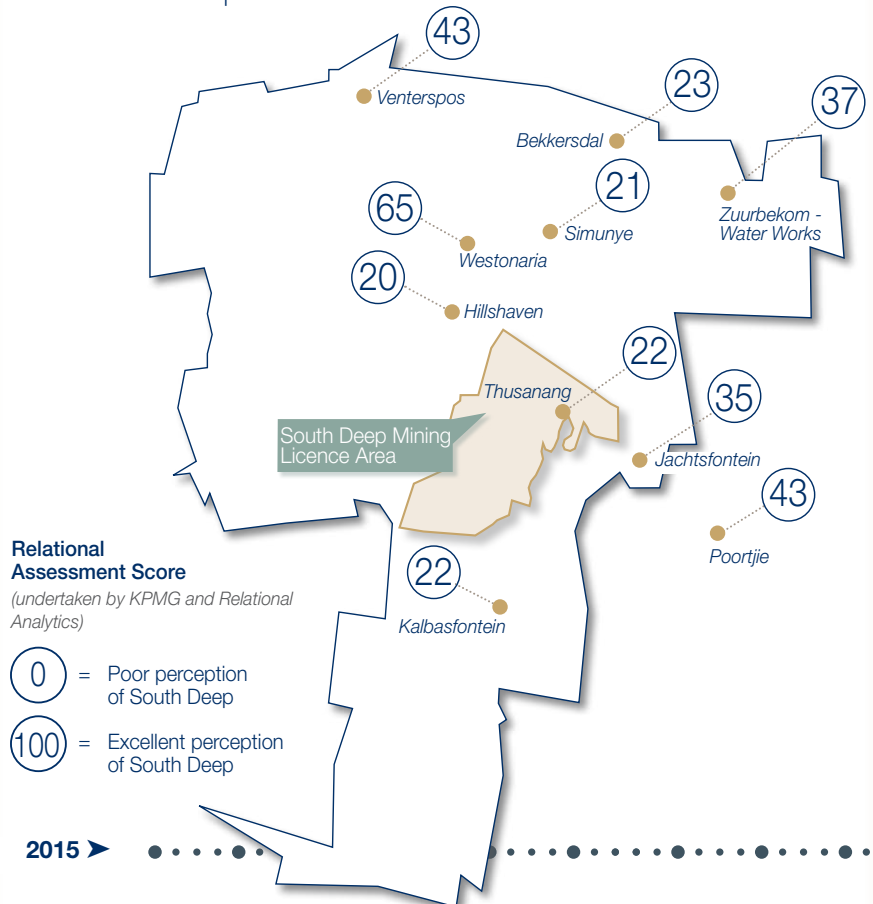
##### Assessment and understanding of community expectations

South Deep undertakes a project to measure the strength, quality and challenges to community expectations with 'relational proximity' studies in 10 adjacent communities. These assessments reveal a significant gap in South Deep's community investment programme and its ability to positively impact community perceptions

#### South Deep Community Risk Assessment

- 1 Poor relations between mine and stakeholders
- 2 Stakeholder perceptions
- 3 Insufficient planning for mine closure
- 4 Community protest
- 5 Stakeholders communicating on behalf of mine
- 6 Local government elections
- 7 Socio-economic landscape in Westonaria
- 8 Expansion of Thusanang community
- 9 Theft of mine property and gold
- 10 Lack of benefit from South Deep & Trusts

#### Host communities and their perceptions of South Deep





## 5.2 Social licence to operate – Strategic focus areas (continued)

### *Community trusts*

In 2015, South Deep began collaborating with the trustees of the South Deep Education Trust, the South Deep Community Trust and the Westonaria Community Trust to facilitate more effective delivery of project benefits to host communities. During Q4 2015, a strategy document, informed by engagements with key community stakeholders, was ratified by the trustees of the South Deep Education and Community trusts.

During the year, there has been a significant acceleration of funding by the three South Deep trusts with a particular focus on educational initiatives, such as supporting two tertiary technical institutions and Early Childhood Development near South Deep and allocation of bursaries to high school and university students in the Eastern Cape and KwaZulu-Natal, two of the major labour-sending areas of the mine. During 2015 the South Deep trusts spent a combined R12 million (US\$1 million) and the Westonaria Community Trust R12.3 million (US\$1 million) on community and education projects.

### *Local procurement*

The local procurement project was initiated in 2015, with the aim of increasing the ability of local community entrepreneurs to provide goods and services to South Deep and, potentially, other businesses in the area and consequently stimulate local job creation. Entrepreneurs in host communities were interviewed and around 500 enterprises and 4,900 individuals were recorded as potential suppliers to South Deep. This list will be further analysed through a business diagnostics exercise to be undertaken early in 2016 by a business incubator firm.

### *Thusanang community*

The informal settlement of Thusanang, which is located 1km from South Deep, is the mine's closest host community and one that has grown from about 370 households in 1999 to about 3,500 households in 2015. Only about 10% of these households have a member working, some of them at South Deep, the remainder are unemployed. This presents a significant risk to South Deep. A relationship assessment was undertaken last year, and together

with the findings and recommendations of a community profiling exercise, forms the basis of an action programme to be started in early 2016. A key focus of the first phase of this plan is to prevent any further growth in the Thusanang settlement, thereby giving South Deep the opportunity to develop alternative economic scenarios in co-operation with local stakeholders.

### *SLP projects*

In parallel to the development of the extended community investment strategy for Westonaria, South Deep continued to invest in its SLP projects during 2015. The most important projects were:

- › The restoration of the historic Healdtown College in the Eastern Cape completed in early 2015
- › The building of the Thusanang Community Clinic in our closest host community with the facility set to be handed over to the Department of Health in early 2016
- › The completion of a bakery at South Deep, with the mine's hostels acting as anchor clients. The bakery became fully operational in February 2016, employing five people



› Independent bakery funded by South Deep



## Shared Value

### What is Shared Value?

Shared Value is created when companies take a proactive role in simultaneously addressing business and social needs. Shared Value goes beyond mitigating the potential harm in a company's value chain - it is about identifying new opportunities for economic success by incorporating social priorities into business strategy and working collaboratively with multiple stakeholders to find solutions to various socio-economic and environmental issues. A key component of this approach is to ensure that the value created is shared by the business and the community. Strong local businesses and skilled individuals contribute to the overall economic upliftment and sustainability of communities while delivering the goods and services that Gold Fields needs to develop and operate its mines.

### Shared Value at Gold Fields

The relatively low gold price and the restructuring of Gold Fields' key operations has made maintaining historical levels of SED spending a challenge. Furthermore, it is not clear whether SED spending is the most effective way to support long-term,

sustainable community development. In this context Gold Fields introduced Shared Value to the business in 2012.

Implementation of Shared Value also remains an imperative for Gold Fields as a key component of maintaining and strengthening our social licence to operate. The Shared Value projects we have implemented are aimed largely at addressing the priority needs of our host communities which include employment, procurement, skills and access to water.

Our Shared Value approach is based on four key pillars:

1. Strategic interventions, to proactively address socio-economic challenges that can drive community tensions, non-governmental organisation activism or more restrictive regulations
2. Integration to proactively address socio-economic challenges
3. Participation in collaborative action with other stakeholders
4. Transparency regarding Gold Fields' economic contributions to its host societies in line with World Gold Council guidelines

Building on the Shared Value projects that were initiated in 2014

the projects listed on the following pages were either started in 2015 or continued from 2014. The Damang Quarry project, which was started as a Shared Value project in 2014, stalled in 2015 as a result of the company planning to run the quarry business encountering financial constraints. A similar project involving waste rock crushing and screening was planned for Tarkwa mine in 2015. This project has been slow to start as a result of licencing constraints experienced by the independent business partner.

An additional Shared Value project is to establish a strong local supplier base among our host communities at South Deep. This is detailed on page 116.

Gold Fields' will actively pursue the listed Shared Value projects below but we are also finding that increasingly our SED spend is channelled into projects that by their nature benefit both the community and our business. Since Shared Value is becoming more integrated and embedded there is no need to delineate new projects - rather our normal community investment spend will offer similar benefits both to communities and Gold Fields.



➤ Skills development training at South Deep

## 5.2 Social licence to operate – Strategic focus areas (continued)

### Shared Value projects

#### Tarkwa and Damang mine (Ghana)

##### Road rehabilitation



##### > Project

Gold Fields Ghana, in partnership with the government of Ghana is upgrading the 33km road between Tarkwa and Damang and paving the road surface in bitumen. The total cost of this project is estimated at US\$15 million over two years, of which Gold Fields will pay an estimated 35%. Contractors who will be building the road will be asked to prioritise local employment as part of their recruitment policy. Contracts are expected to be awarded in early 2016.

##### > Benefit to the community

During construction of the road, job opportunities will primarily go to workers from our impacted communities. The improved road infrastructure will benefit all public road users as travel times, vehicular accidents and vehicle maintenance costs will be reduced. Roadside communities will no longer experience dust emissions since the road will be surfaced.

##### > Benefit to Gold Fields

Gold Fields will save on the cost of transport as the maintenance of vehicles transporting labour, goods and materials will be reduced. Road maintenance costs will also be reduced. The improved infrastructure will also reduce employees' travel time by 35 minutes per journey, could limit driver fatigue and will enable emergency services to operate more efficiently.

#### South Deep (South Africa)

##### Education and skills development



##### > Project

In 2014, Edumap College partnered with South Deep to help post-matric students who had not achieved university exemption or had not been able to qualify for entrance into tertiary institutions, to improve their grades in Mathematics and Science. They received extra tuition and life skills training, and re-wrote matric at the end of the year.

The project was continued in 2015 through the South Deep Education Trust and a new intake of students was enrolled in Edumap College. Further components were added to the project in 2015 - South Deep, in partnership with Sci-Bono, provided extra lessons in Mathematics, Science and Accountancy for selected matric students from all schools in the local community.

The mine also partnered with the Provincial Department of Education in preparing Grade 12 students for their final examinations via a residential camp providing motivational talks and career guidance.

South Deep is currently looking at expanding this Shared Value project to include the mine's sponsorship of the Wits University Mining Engineering School as well as working more closely with the South Deep Education and Community Trusts, which are independently supporting a range of early childhood development, secondary and tertiary education projects.

##### > Benefit to the community

Apart from the obvious benefit derived by the individual students, the broader community benefits from the fact that an increased proportion of their youth is likely to receive tertiary education and ultimately find employment. This is significant, given the fact that a single employed individual in the mining industry supports on average eight dependants.

##### > Benefit to Gold Fields

The programme provides Gold Fields with a much-needed local skills pipeline of individuals with mathematics and science-related degrees.

Cerro Corona mine  
(Peru)

Water and the environment



> Project

This is a four-year programme started in 2014 to improve water quality and access to communities of Hualgayoc in the mine's direct area of influence and to promote, in partnership with government, remediation of legacy mining activities (not associated with Gold Fields). The programme involves building new potable water systems through the construction of a water pipeline from a well at Cerro Corona, a programme to identify and repair water leaks in the existing water infrastructure, and remediation of environmental liabilities that are contaminating a local stream. More details can be found on page 100.

> Benefit to the community

Close to 90% of households in Hualgayoc now have access to sufficient clean running water. Those families whose homes are situated at an altitude too high to be connected to the water pipeline previously received water tanks from Gold Fields, and will now receive water supply from a well located at Cerro Corona. Apart from strengthening relationships between Gold Fields, the regulator and our host communities, the remediation of legacy mining sites near Cerro Corona will significantly improve the quality of the water in the El Tingo river, on which communities depend for various uses.

> Benefit to Gold Fields

Strengthens our social licence to operate in a region in which other mining companies have experienced water-related conflict with local communities. It also reduces the cost of trucking our water to the community.

Cerro Corona mine  
(Peru)

Local suppliers



> Project

A three-year project, in partnership with SwissContact, was started in 2014 to build the competitiveness of local suppliers. Fifty local businesses have been identified and are undergoing business diagnostics and benefiting from an individual improvement plan and technical training. A local supplier management system has been designed.

> Benefit to the community

Individual local suppliers will derive long-term benefit from targeted plans to help them improve their competitiveness and diversity their customers while the broader community will experience economic upliftment and employment opportunities from having stronger, sustainable local businesses.

> Benefit to Gold Fields

Gold Fields will be able to obtain a better service at more competitive prices from local suppliers.

## 5.2 Social licence to operate – Strategic focus areas (continued)

### Human rights

Gold Fields applies a formal Human Rights Policy statement, both in dealing with its employees as well as external stakeholders. The policy statement is aligned to the relevant ICMC Principles on Human Rights and the United Nations' 'Protect, Respect and Remedy' Framework. Under the policy statement, Gold Fields commits to:

- ▶ Not interfering with or curtailing other's enjoyment of human rights
- ▶ Defending (where possible) employees and third-party individuals and groups (as defined in our Community Policy) against human rights abuses
- ▶ Taking positive action to facilitate the entrenchment and enjoyment of human rights

Given the nature of Gold Fields' footprint, activities and relationships, the human rights policy places specific emphasis on:

- ▶ Community engagement
- ▶ Indigenous rights
- ▶ Resettlement
- ▶ Security and human rights

### Internally

Gold Fields upholds the highest standards of human rights within its workforce, including:

- ▶ Freedom from child labour
- ▶ Freedom from force or compulsory labour
- ▶ Freedom from discrimination (while recognising the need to address the legacy of historical injustices in South Africa)
- ▶ Freedom of association and collective bargaining

All induction training (including that provided by Gold Fields' internal protection services team) includes key human rights elements – and the Group's internal grievance mechanisms help ensure employees and contractors can raise human rights concerns. All grievances are handled by Gold Fields Human Resources departments, which use a defined process to record, evaluate

and address legitimate complaints. Employees can also raise concerns via independent counsellors as part of Gold Fields Employee Assistance Programme.

### Externally

Under the United Nations' 'Protect, Respect and Remedy' Framework – and the associated Guiding Principles on Business and Human Rights – it is incumbent on Gold Fields to carry out human rights due diligence not only on its own activities, but also on its business relationships.

### Contractors and suppliers

Gold Fields' business relies on multiple contractors and suppliers to carry out mining, development, construction and other forms of work on its operations. All contractors are included in Gold Fields' own health and safety management systems, to help ensure that contractor employees benefit from safe and healthy working conditions.

All contractor employees wishing to report human rights violations are able to make use of Gold Fields' confidential, third-party whistleblowing hotline. Where such complaints are made, Gold Fields will pursue the matter appropriately.

Gold Fields does not currently carry out human rights due diligence on its suppliers. Nonetheless, the Group has developed an external party screening solution to establish risk profiles of external suppliers and contractors. Among other criteria, the tool screens new and existing contractors and suppliers for human rights and related violations and/or transgressions (p38).

### Security providers

Gold Fields' protection services team works with both private and public security providers – for the effective and responsible protection of workers and assets. All private security contractors receive human

rights training during induction – based on local legal requirements, as well as national and international human rights best practice, including the Voluntary Principles on Security and Human Rights. Gold Fields is also a signatory to the International Code of Conduct for Private Security Service Providers and the United Nations Global Compact. There were no formal complaints made against Gold Fields' internal or external security providers in 2015 in relation to human rights violations.

### Materials stewardship

As part of its efforts to improve human rights performance within its broader value chain, to protect the reputation of its core product and to maximise the societal benefits of its activities, Gold Fields is committed to responsible materials stewardship. In this context, Gold Fields supports global efforts to tackle the use of newly mined gold to finance conflict. There is currently only a minimal risk of externally derived conflict gold entering Gold Fields' value chain. This is because:

- ▶ None of Gold Fields' mines are located in conflict-affected countries
- ▶ All gold produced originates from Gold Fields' own operations
- ▶ No gold is purchased from artisanal miners

Gold Fields has voluntarily adopted the Conflict-Free Gold Standard of the World Gold Council (WGC). This has led to the standard being applied at all relevant locations through full assurance audits. This is a requirement of London Bullion Market Association (LBMA) accredited refineries. In addition, the company reports in accordance with the WGC guidelines on value creation and distribution. Although Gold Fields withdrew its WGC membership in 2014, it has and will continue to apply both the Standard and guidelines.

## Focus on people

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*Twin shafts and winder house at South Deep*

# 6.1 People – Driving a high-performance culture

## Overview

### Group human resources performance

Category	2015	2014	2013	2012 <sup>5</sup>
Total employees (excluding contractors)	9,052	8,954	10,167	9,684
Contractors	7,798	6,486	6,685	8,961
HDSA employees in South Africa (%) <sup>1</sup>	71	71	70	68
HDSA employees in South Africa (%) - Senior management <sup>1</sup>	48	47	44	31
National employees in Ghana (%) excluding contractors	99	99	99	98
Minimum wage ratio <sup>2</sup>	1.50	1.70	3.00	3.00
Female employees (%)	14.00	14.00	10.90	12.00
Ratio of basic salary men to women	1.09	1.10	1.20	1.43
Employee wages and benefits (US\$m)	410	468	595	780
Average training (hours per employee)	240	181	97 <sup>3</sup>	142 <sup>3</sup>
Employee turnover (%) <sup>4</sup>	8.00	20.20	10.00	8.00

<sup>1</sup> Excluding foreign nationals, but including white females and corporate office staff; HDSAs – Historically Disadvantaged South Africans, according to the Employment Equity Act definition

<sup>2</sup> Entry level wage compared to local minimum wage. The narrowing of the ratio reflects a sharp rise in the minimum wage in Ghana

<sup>3</sup> Figures do not include Yilgam South assets

<sup>4</sup> Includes voluntary and involuntary turnover

<sup>5</sup> Excludes Sibanye Gold

The profile of our workforce was profoundly impacted during the initial years of our Group-wide transformation journey (2012 – 2014) with large-scale reductions in the number of employees and contractors. However, since then our human resource base has stabilised with 9,052 employees and 7,798 contractors on our books at the end of 2015. Since the restructuring our smaller, yet more skilled, workforce has ensured that Gold Fields works more efficiently within more constrained budgets and we believe that the size and skills level of the workforce is appropriate to successfully deliver our business strategy.

Gold Fields’ People Strategy focuses on building a high-performance culture that ensures our people deliver on the business strategy of creating shareholder value through cash generation from a portfolio of largely mechanised assets.

Today our business requires a smaller, highly skilled workforce that can work more efficiently, within leaner budgets, and that is

incentivised to deliver against clearly defined performance targets. To ensure our People Strategy supports our business objectives, the following five focus areas have been identified, of which the first four are incorporated into the Group balanced scorecard:

- 1. Talent management:** ensuring we have the right people in the right jobs at the right time
- 2. Performance management:** measuring, incentivising and motivating people to expend discretionary effort to deliver high-performance results
- 3. Communication and engagement:** ensuring employees have the information and two-way engagement platforms they need to understand and operationalise the business strategy
- 4. Great people managers:** building strong people management skills in line managers, and empowering them with the tools and processes necessary to understand, attract, motivate and manage a diverse workforce

- 5. Supportive work environment:** ensuring employees have the environment and tools needed to function optimally, taking into account their holistic wellbeing, so that we have a safe, healthy, balanced and productive workforce.

Critical to the success of the new People Strategy is the launch of a new centralised electronic human resources platform, called ‘SuccessFactors’, which replaces the different software systems used by the regions. It houses a full suite of modules across the HR value-chain – for the first time the balanced scorecard, talent reviews, succession planning, learning management, recruitment and compensation will be integrated on a single user-friendly platform. It provides real-time HR information to managers, as it is integrated to our payroll system, and also facilitates two-way feedback from employees.

**Total workforce by region**

2015	Total workforce	Permanent employees	Contractors
Americas	2,044	375	1,669
Australia	2,206	1,549	657
South Africa	5,837	3,699	2,138
West Africa	6,670	3,336	3,334
Corporate Office	93	93	–
<b>Total</b>	<b>16,850</b>	<b>9,052</b>	<b>7,798</b>

Proportion of Nationals per region	2015	2014	2013
Peru	99.5%	99.2%	99.9%
Australia	98.0%	98.0%	97.0%
South Africa <sup>1</sup>	81.0%	84.0%	83.0%
Ghana	99.0%	99.0%	99.0%

<sup>1</sup> Nationals includes all South Africans and excludes all foreign nationals



> Underground employee at our Australian operation

## 6.1 People – Driving a high-performance culture (continued)

### What we achieved in 2015

#### 1. Talent management

- We continued to enhance talent management by:
- › Evolving our talent review process to align to the business' talent needs
  - › Rolling out a talent pipeline strategy for each region, to take emerging talent through a structured career development path
  - › Strengthening our recruitment practices by introducing more robust psychometric tests

#### 2. Performance management

- Progress in performance management was achieved by:
- › Refining the Balanced Scorecard (BSC) pillars to focus on Financial, Business Optimisation, Social Licence to Operate and People
  - › Linking each BSC pillar to smaller, achievable, directly linked objectives
  - › Cascading Group objectives to regional, operational, departmental and individual scorecards
  - › Providing line managers with targeted training to conduct performance conversations
  - › Maintaining the clear link between incentives and performance

#### 3. Communication and engagement

- Steps to improve communication and engage employees included:
- › Approving and implementing a Group-wide internal communications strategy
  - › Adopting various internal engagement tools to facilitate two-way communication with employees
  - › Conducting a series of roadshows, hosted by our CEO, addressing employees in each region
  - › Sharing of operational and Group results by regional management

#### 4. Great people managers

- Achievements in people management included:
- › Achieving positive participation in our management development programme
  - › Finalising our expanded suite of leadership training programmes
  - › Tracking our capabilities, enhancing training, and directly linking people management and incentives

#### 5. Supportive work environment

- We continued to build a supportive work environment through:
- › Focusing on our comprehensive regional wellness programmes centred on employees' specific needs
  - › Rolling out our Employee Value Proposition as part of the Gold Fields DNA training

Ensuring employees have the information and two-way engagement platforms they need to understand and operationalise business strategy

Communication and engagement

3

Performance management

2

Measuring incentivising and motivating people to expend discretionary effort to deliver high-performance results

A compelling value proposition to drive an engaged workforce

Talent management

1

Ensuring we have the right people in the right jobs at the right time



## Focus areas for 2016

### 1. Talent management



With a longer-term view of talent and development, we will focus on:

- › Redefining team and leadership competencies
- › Implementing an increasingly integrated and purposeful succession planning programme
- › Enhancing the alignment between career and succession plans
- › Linking learning to competency gaps
- › Increasing talent segmentation through more rigorous performance management

### 2. Performance management



Looking beyond key performance indicators, we will focus on:

- › Continuing to assess how line managers enable performance and undertaking further training to fill the gaps
- › Increasing our focus on managing poor performers
- › Ensuring ongoing communication to strengthen the link between strategy and performance measures
- › Harnessing trend data and metrics related to high and low performers through Success Factors

### 3. Communication and engagement



We will continue to improve communication through:

- › Focusing on making the business strategy relevant to our regions, operations and individuals
- › Launching new communications training for line management
- › Introducing new ways of cascading messages to all employees
- › Revitalising the Gold Fields DNA, Values and Vision in line with Gold Fields' evolution
- › Integrating all internal communications into our Success Factors platform to enhance two-way engagement

### 4. Great people managers



Steps to improve people management will include:

- › Identifying hurdles to successful people management and rolling out targeted training to address the gaps
- › Refining people management objectives in the BSC
- › Investigating incentives for better people management
- › Enabling managers to celebrate team members' achievements on recognition platforms

### 5. Supportive work environment



We will build a supportive work environment by:

- › Continuing to refine and communicate our Employee Value Proposition
- › Focusing on wellness issues specific to regional needs, including:
  - › The mental health of Fly-In-Fly-Outs (FIFOs) in Australia
  - › Financial wellness and malaria management in Ghana
  - › Sports and nutrition in Peru
  - › The provision of housing, lifestyle disease management and financial wellness in South Africa



## 6.2 People – Strategic focus areas

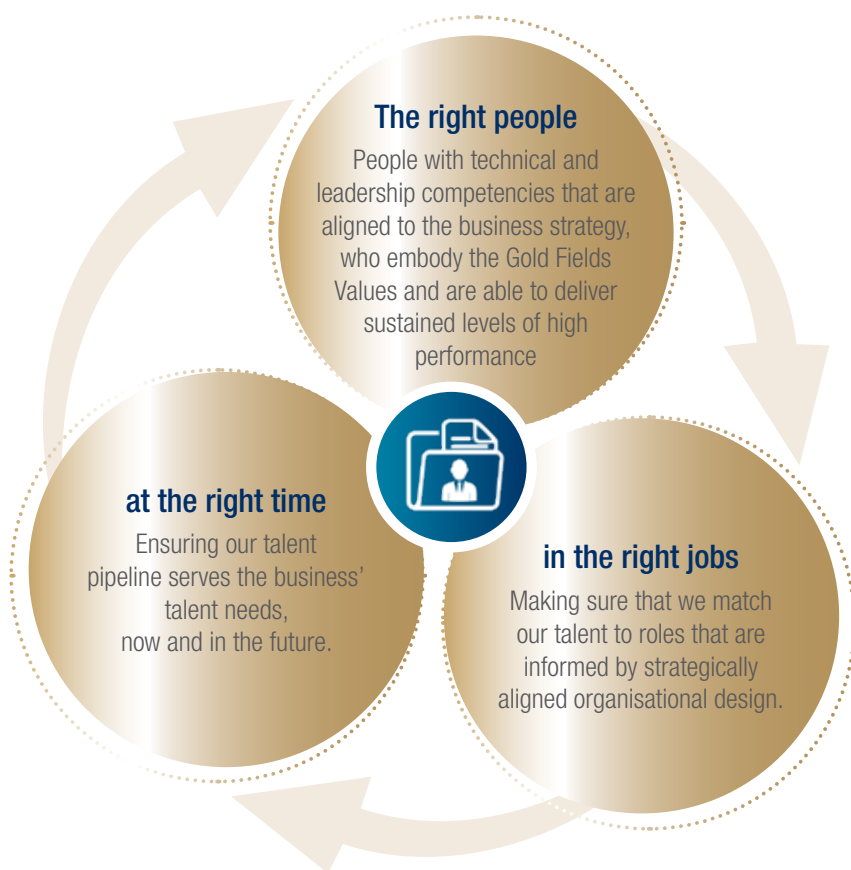
### Talent management

#### Approach

The provision of world-class training, skills development and management training is central to driving a high-performance culture. It enables the Group to attract and retain the best talent; enhance employee productivity and safety; and achieve its strategic objectives.

In 2015, approximately US\$12.4 million was spent on training and skills development across the Group (2014: US\$13.4 million). This was invested chiefly in the delivery of fit-for-purpose technical training, comprehensive leadership development programmes and training to ensure global alignment with the new Gold Fields culture.

Having ‘the right people in the right jobs at the right time’ can be further defined as follows:



Certain Group-wide strategies, policies and structures are in place to drive the talent management agenda. The talent acquisition strategy and the training and development strategy take into account Gold Fields' immediate and long-term talent requirements, while the performance management system seeks to reward and retain top performing talent.

There is flexibility in how the regions approach talent acquisition and management. This helps ensure that regions are able to determine the best approach to meeting the specific requirements of their operations.

#### Group-level talent management in 2015

##### *Evolving the talent review process*

Historically, the talent review has focused only on high-potential D-band and above employees, who represent the future leadership of the business. However, a large proportion of our high-performing employees are skilled specialists in their field who may not have leadership aspirations but are nevertheless critical to the organisation. Their wealth of skill and experience makes them difficult and costly to replace, and they form the very core of the high-performance culture we are trying to build.

A targeted programme is required to engage them and understand their needs and drive their growth and development. For this reason, talent councils are being established in each region in 2016 to identify high potential and high performing talent. Each region is tasked with developing relevant programmes for their operations.

##### *Australia*

In Australia, the Fly-In Fly-Out (FIFO) working arrangements are better suited to our operations in remote areas where employees are either required to live in camp or fly in and fly out. Only the St Ives mine offers

full-time residential opportunities, though it does not have quality high school facilities or major tertiary educational institutions. This makes it difficult to retain individuals when they eventually settle down and start families or their children need to go to high school. This, along with the challenge of attracting permanent, skilled people to work on remote mines, accounts for the higher employee turnover in Australia particularly among younger staff (15% in 2015, down from 18% in 2014).

#### *Talent management strategies employed*

Across all Australian operations, we run internal technical training, leadership development training and training in contractor management. Where opportunities for growth and promotion are not readily available, the region has created opportunities for employees to gain development through other channels. The talent review process also identifies individuals who will benefit from exposure to other sites in the region.

#### *South Africa*

In South Africa, socio-economic factors drive an extremely high unemployment rate among young people and there is significant pressure on mining companies to create employment opportunities. However, poor standards of education and lack of opportunity to study at a tertiary level, means many unemployed South African youth do not have the education and skills required by our South Deep operation, which relies on specialist and currently rare skills in mechanised mining.

#### *Talent management strategies employed*

As South Deep, we have found that the existing skills base of our miners, largely recruited from conventional gold mines in South Africa, is not sufficient for the mechanised mining equipment and machinery required at the project. To augment the current skills base, South Deep

therefore recruited an additional 146 skilled employees during 2015, mostly from the platinum sector, which has a similar mechanised mining skills set. The three-year wage agreement with South Deep's trade unions, signed in April 2015, sets the remuneration framework which facilitates the recruitment and retention of the required mining skills.

However, our strategy remains to grow the majority of our own people through focused internal training. During the year, we provided training programmes to 47 artisans, working on our fleet of equipment as well as 15 junior managers, mine supervisors and mine overseers, to equip them with critical mechanised mining and engineering skills. There was also a focus on management and other leadership skills.

Since South Deep is at a critical juncture in bringing the mine up to higher production levels, this has necessitated a fine balancing act with the need to implement comprehensive skills development plans. For example, to address the upskilling of our artisans, a two-year agreement was reached with AtlasCopco, one of South Deep's original equipment manufacturers (OEM). Under the agreement, all artisans and foremen at a segment of the mine have been redeployed to new working areas and will undergo a comprehensive training programme to bring their skills up to the level required by the mine. While they are receiving this training, the OEM contractors will maintain the machinery used in the trackless environment. Once the two-year period is up, artisans and foremen will have the opportunity to return to their original workplaces, and machine maintenance will again be managed internally.

Literacy levels on the mine remain an ongoing skills challenge, which we continue to address through a targeted training programme. A key focus of the people pillar in South Deep's new operational plan is to collaborate with the wider mining

industry, tertiary institutions, equipment suppliers and other external players to develop a strong skills development capacity and adopt leading practices.

Gold Fields is committed to employing HDSA, where possible, as this maximises the impact of South Deep in terms of economic value generation and skills transfer. It is also in line with the aims and targets set out by relevant employment equity regulations. At the end of 2015 69% of South Deep's total employees were HDSA (as defined by the Mining Charter) and 50% of its senior management team.

#### *West Africa*

Education levels among young, urban Ghanaians are high but there is intense competition for employment opportunities. While this makes it easier for the Company to build a talent pipeline from the ground up and, to meet its localisation targets, it also means that the Company has to keep employees well rewarded and engaged to retain them.

#### *Talent management strategies employed*

The key talent management focus areas are localisation and employment of people from host communities; retaining high potential employees; and skills development of operators.

Bursary programmes benefit youth in local communities, but there are currently few opportunities to create on-mine employment for them due to the depressed mining market. On the localisation front, around 95% of managerial positions are held by locals, as Ghana has a comprehensive skills transfer and mentoring programme in place which ensures that expat employees are paired with potential local successors.

Some employees have been sent on short-term assignments outside of the Company to offer them exposure

## 6.2 People – Strategic focus areas (continued)

to growth opportunities and keep them engaged and motivated. Other training programmes during the year have focused on improving operator efficiency and certification, short-term assignments for high-potential employees, and on-the-job coaching and training.

It is important to note that high quality education does not necessarily reach young people in the host communities around our mines in Ghana, South Africa and Peru and that many of the skills come from other parts of the country. But since our social licence to operate is tied to expectations from these communities there is a strong focus on implementing programmes that educate and upskill young people in the communities adjacent to these operations.

### Americas

#### Contextual challenges

In Peru, we have a highly skilled workforce, which means that the Company needs to deliver strong remuneration and other benefits as well as growth opportunities to ensure it keeps its employees engaged and motivated.

#### Talent management strategies employed

The key talent management focus in Peru is on developing leadership skills. Peru continued to run the Young Talent programme that invests in top university students studying in a range of industry-related fields. A three-year work-back arrangement forms part of the agreement and involves a full career development plan that includes mentoring. In 2015, 10 people benefited from the programme. In the year ahead, the programme will be expanded to include students who are studying degrees in the technical fields of mining.

The region's career path programme also focuses on further developing the skills of operational and technical employees and during the year Cerro

Corona invested US\$330 000 in dedicated technical training programmes. Successful progress through training stages are linked to salary increases and bonuses commensurate with their enhanced skills levels.

### Performance management Approach

The performance management system, driven through the Balanced Scorecard (BSC) for D and E-band (middle- to senior management and professional) employees, ensures we identify, incentivise, reward and thereby retain top performers, and identify skills gaps among low-performers that could be addressed through training and development programmes.

The BSC is structured around four key business pillars: financial, business optimisation, people and social licence to operate. Within each of these pillars, key focus areas are identified, and matched to goals and, finally, metrics for delivery.

Through a structured cascading model, the Group BSC informs the BSCs for each of our regions, which in turn drive operational, departmental and then individual BSCs. An employee's BSC rating is a 35% determining factor in their annual bonus calculations, with the Group's performance determining the remaining 65% portion. This percentage varies based on the position of the employee.

### Performance management initiatives during 2015

The BSC itself is reviewed and refined on an annual basis. The four pillars for 2015 were adopted to ensure greater alignment with Group business objectives and the number of objectives reduced to a smaller, more focused group. The BSC was again adjusted around the same four pillars for 2016 (p26).

### Introducing a new production bonus system at South Deep

Bargaining unit employees at our South Deep operation are measured and rewarded through a production bonus system, instead of the BSC. Following issues raised in 2014 by trade unions, the mine introduced a new production bonus system in 2015, ensuring that the behaviours being driven and rewarded on the mine support the achievement of South Deep's business objectives and entrenching the high-performance culture necessary to the success of this critical operation.

The following bonus parameters have been incorporated in the new bonus system: gold produced, metres/tonnes produced, and safety performance. Gold produced and delivered out of the plant serves as a qualifier, which means that the mine must first produce gold before any bonus parameter kicks in.

The performance of individual crews – not whole corridors – is measured, ensuring greater accountability is devolved to the level of small teams and individuals. All teams are now measured on tonnes or metres advanced – in line with mine design. The new production bonus system also now includes all employees on the mine, which rallies employees around the achievement of a single, common goal.

Safety remains a key metric in the new production bonus system and accounts for 30% of every employee's production bonus. A leading safety indicator has been added to ensure employees are rewarded for behaviours that proactively work to prevent safety incidents – and not simply penalised for accidents. The safety score is now split evenly between lead and lag indicators.

Finally, South Deep introduced a quarterly gold sharing scheme in addition to the monthly production bonus. This scheme benefits employees in core production and core support jobs, further incentivising and rewarding them for gold produced over the quarter.

### People management Approach

Closely linked to performance management is our emphasis on building strong people management skills in line management. We have a contingent of technically skilled individuals, but these competencies are not necessarily matched by strong people management skills. Line managers are the link between the organisation and its people, and it is imperative that line managers are empowered with the skills and tools to engage, motivate and drive performance in their teams. As such a people pillar was included in the BSC as a first step in measuring and incentivising the people management capability of line managers.

The majority of our management team participates in the Group's Management Development Programme. We also finalised an expanded suite of leadership training programmes to equip managers with the tools to have meaningful, targeted performance conversations with team members.

Refined leadership competencies expected of Gold Fields managers and leaders together with the introduction of more robust psychometric assessments, will ensure that our recruitment practices support the selection of the right kinds of people managers.

### Communication and engagement

Communication and engagement was one of the areas rated below-par by employees in a 2014 internal climate survey. Employees highlighted the need for

communication that created a clearer link between Group and regional strategy, and the role of each employee. As a result, the internal and external communications functions were split and internal communications was moved from corporate affairs to human resources, where an in-depth understanding of the employee audience is housed.

### Communication focus during 2015

#### *Communicating strategy and purpose*

During 2015, a new Group internal communications strategy was approved. It drives consistent, improved communication – informed by business strategy and goals – from the Group to employees, and seeks to develop effective, cascading two-way engagement platforms so that employees can communicate with the Group.

One of the key focus areas during the year was the standardised communication of the Group-wide strategy, key strategic objectives for the year, and how the Group is performing against these objectives on a quarterly basis. A variety of communication channels were used, including video, poster campaigns and on-site presentations at a regional and operational level. Our new interactive communication system, housed in the SuccessFactors platform, also facilitates improved two-way communication between the Group and employees.

In many operations line management engages with the workforce on a regular basis, but this is often driven by the communication skills and aptitude of individual managers. There is a clear need to build standardised structures that ensure that line management have the tools, training, platforms and material to engage with their teams.

During the year, Peru developed and rolled out a structured communication model that provides line managers with an easy-to-use toolkit to systematically cascade important messages to their teams. This tool will be adapted for other regions and operations during 2016.

Group leadership continued to drive the communication agenda during the year. In Peru, Australia and Ghana, regional Executive Vice-Presidents or mine General Managers held formal communication sessions with employees at least on a quarterly basis. The new management team at South Deep will adopt similar practices in the year ahead.

#### *Understanding what employees think and feel*

Comprehensive employee surveys provide a holistic view of employee concerns, and Gold Fields will continue to run them every second year with shorter surveys taken annually.

A user-friendly digital survey software package was purchased during the year to facilitate the roll-out of shorter, more frequent 'pulse surveys'. It was used to great effect in rolling out a follow-up survey to the 2014 climate survey, which focused on the four lowest-scoring areas: performance management, recognition, training and development; and communication and engagement.

### Wage gap

Executive remuneration remains a sensitive issue, globally. However, companies in development countries, like South Africa, face an added complexity. Scarce skills and talent retention remain a challenge but this has to be countered by the need to remain globally competitive against countries with cheaper labour rates.

## 6.2 People – Strategic focus areas (continued)

Balancing these challenges places wide-ranging responsibilities on executives. Furthermore, heightened disclosure of executive pay has required remuneration committees to ensure that their executives' wage packages are not out of line with those in their peer group.

The wage gap – broadly defined as the difference between executive pay and earnings of those working at the lowest levels of a company – has become a controversial issue in South Africa. Socio-economic tensions and widespread labour unrest are partially attributable to perceived pay disparities and disclosures of executive pay levels.

For most of the past decade executive pay hikes have exceeded those of lower level employees. However, despite the global upward pressure on executive pay levels, the wage differential has narrowed in recent years amid higher annual increases awarded to employees represented by organised labour.

This has certainly been the case at our South Deep mine in South Africa where we struck an agreement in April 2015 with workers in the bargaining units that will result in an average salary increase of over 10% in each of the next three years. At entry levels the annual increase was as high as 20.9%.

This has and will continue to contribute to significantly closing the wage gap between our CEO and workers at entry level.

### Union engagement

In South Africa and Ghana, unions are a vital stakeholder at our operations with 93% and 96% of employees respectively holding union membership in those countries. In Peru 10% of our workforce are represented by a

trade union, but this is exclusively at one of our major contractors. While we value and will continue to drive direct engagement with employees, we recognise the important role that unions play in representing the interests of the workforce

### Ghana

Over the past three years Ghana has made considerable progress in strengthening the relationship with unions. This has been helped by a salary benchmarking and adjustment exercise that now places Gold Fields Ghana's salaries among the most competitive in the industry.

During the year, declining production at our Damang operation necessitated a review of employee numbers. Constructive engagement with the unions resulted in a Memorandum of Understanding being signed for Damang to retrench 401 employees by the end of March 2016, the majority of whom will be employed by the contractor.

In early 2016, we also completed wage negotiations with the Ghana Mineworkers Union for 2015. Wage negotiations for 2016 could take place through centralised bargaining via the Ghana Chamber of Mines.

Details are discussed in the Remunerations section on page 132.

### South Africa

In South Africa, the relationship with the unions has historically been a difficult one, and in the context of repeated changes in South Deep management it has been a challenge to cement a sustained positive relationship. However, a great deal of work has been done engaging with the unions over the past year, and the relationship has improved considerably. This is evidenced by South Deep's signing

a ground-breaking three-year wage deal with unions that allowed it to avoid industrial action seen at other mining companies during the year. The details of the agreement, which seeks to accommodate the different skills set required at South Deep compared with other gold mines in South Africa, are discussed in detail under Remuneration on page 132.

In 2016, the internal communications strategy will be augmented with policies and structures that include the introduction of a standardised, Group-wide cascading model. Line managers will receive targeted communication training, and a central automated communication platform will be rolled out across the Group as the central communication hub.

### Supportive work environment

Gold Fields strives to create an environment that allows employees to function optimally, taking into account their holistic wellbeing to ensure a safe, healthy, balanced and productive workforce. This includes taking an integrated view of the employee, both during and outside of work hours, including their financial, mental and physical wellbeing, as well as things like nutrition, housing and living conditions, stress and fatigue management and optimal job fit.

The wellbeing needs of employees differ between regions and programmes are therefore implemented at a regional level to deal with challenges specific to each employee group.

All regions have comprehensive wellness programmes in place. In 2015, Peru invested US\$600,000 upgrading camp facilities at Cerro Corona. This included the construction of expanded gym facilities, an indoor sports centre,

a recreation area with barbeque facilities and construction of additional rooms. Peru also offers employees a range of extramural activities and classes.

In Ghana, a new staff recreation centre was constructed at Tarkwa to benefit all employees, while the staff hospital at Tarkwa, which is also used by community members, was refurbished and placed under a new local management company.

In Australia, supportive work arrangements focus both on the camps in which employees live as well as the fly in and fly out arrangements. While the roster arrangements have remained stable over the past few years – for most employees that is 14 days at work and 10 days off – or eight days at work and six days off, Gold Fields has successfully negotiated better flight arrangements and aircraft at some of its sites. Similarly, the camp sites have been upgraded and Wi-Fi access rolled-out at all camps. Fatigue management was a critical

element of our wellness strategy in Australia last year and St Ives changed its working hours to reduce the fatigue risk at the mine.

In South Africa, accommodation for mine employees is regulated under the Mining Charter. We have met all the relevant conditions including a requirement that each South Deep employee resident in our hostels must have his or her own room – this was achieved in December 2014 after a R150 million investment in a hostel upgrade programme creating 848 single accommodation and 203 family units. We are also finalising a housing acquisition and development programme – at a cost of around R346 million – through which around 850 houses in neighbouring districts will be made available to employees to purchase or lease.

A new home ownership scheme – Tswelopele – was launched following the finalisation of the South Deep wage agreement. It

seeks to assist employees to rent these homes or buy them at a discounted purchase price.

The scheme benefits employees in the C-band and below, providing them with a R3,000 per month housing allowance for the first two years of the agreement, with an increase to R3,500 per month in the third year. This housing allowance can be used to pay rent in a South Deep-owned or approved house within a 50km radius of the mine, or to service a bond should they wish to purchase a house.

The Tswelopele scheme offers a R100,000 interest-free loan to qualifying employees to assist them in securing a bond. The scheme also supports employees through financial literacy training, borrower education, negotiation with banks for favourable bond interest rates, assistance with completion and submission of forms among others.



› South Deep plant

# 6.3 People – Remuneration and benefits

## Introduction

The remuneration and benefits offered to employees play a central role in attracting and retaining key talent. These are discussed in the Remuneration Report on pages 43 – 62 of the *Annual Financial Report (AFR)*.

During 2015, the South Deep wage and Ghana wage negotiations were the most notable remuneration and benefits events and are discussed below.

### South Deep wage agreement

South Deep's bargaining unit employees received an average 10% salary increase over the three-year period of the wage agreement that came into effect in April 2015. However, the agreement varies depending on the employee category and goes beyond wage increases to provide employees with a range of benefits. These include:

- ▶ A scarce skills allowance of R4,000 per month in the first year, escalating by R500 per annum over the next two years, for TM3 artisans and Category 1 machine operators
- ▶ A retention allowance of R1,000 per month for Category 2 machine operators and artisans in the plant, backfill, shafts as well as tramming and recovery areas, for each of the three years covered by the agreement
- ▶ An increase of 20,96%, 14,29% and 12,5%, respectively in each of the three years, for Category 4 – 8 employees and an 8% increase per year for miners, artisans and officials
- ▶ A housing allowance to replace the current living out allowance over the three-year period (p131).

### Ghana wage agreement

Gold Fields Ghana concluded 2015 wage negotiations with the Ghana Mineworkers' Union (GMWU) for the bargaining units in early 2016. The outcomes included:

- ▶ A 5% increase on basic pay

- ▶ A GHS 1,000 (US\$250) one-off, development reimbursement
- ▶ A 30% rent allowance for employees not accommodated by the Company

The Ghana Chamber of Mines has proposed collective bargaining with the GMWU for the 2016 wages and working condition negotiations. The GMWU has not consented to this and by March 2016 negotiations had not commenced.

## Summarised Remuneration Report

This is a summarised version of the Remuneration Committee's Remuneration Report, the full version of which can be found on pages 43 – 62 of the AFR.

The key principles of Gold Fields' remuneration policy are to:

- ▶ Ensure that the Group's executive remuneration policy encourages, reinforces and rewards the delivery of sustainable shareholder value
- ▶ Provide competitive rewards to encourage ownership in the business, as well as setting stretch

performance targets for the delivery of reward-based variable short-term and long-term incentive plans for its executive directors and senior management

- ▶ Motivate and reinforce individual, team and business performance in the short, medium and long term.

The remuneration strategy is underpinned by sound remuneration management and governance principles, and comprises the following key elements:

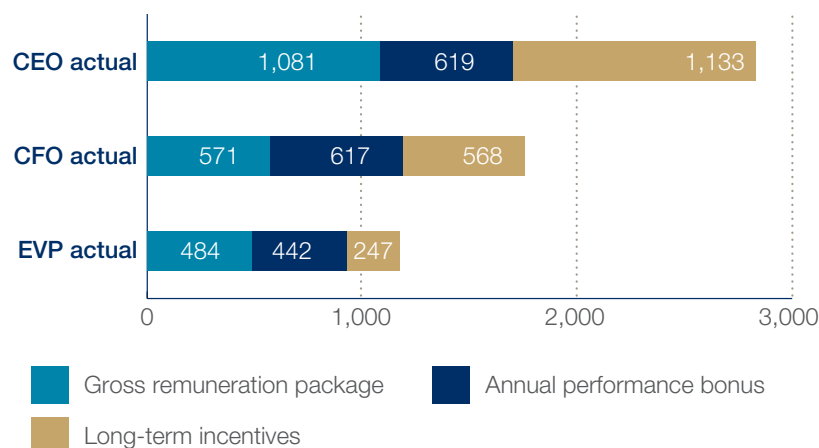
- ▶ Guaranteed pay
- ▶ Benefits
- ▶ Short-term incentives (STI), i.e. annual performance bonuses
- ▶ Long-term cash incentive instrument i.e. as detailed in the Long-Term Cash Incentive Plan (LTIP).

Gold Fields' remuneration philosophy aims to attract and retain motivated, high-calibre employees, whose interests are aligned with those of our shareholders. This is achieved through a balance of guaranteed and performance-based remuneration (variable pay).

The pay components for our executives are displayed below:

### Total remuneration actual outcomes for 2015

(US\$'000) (An average exchange rate of US\$1= R12.68 for 2015 was used)





**Guaranteed pay and benefits (Remuneration package)**

Gold Fields' policy is to reward its people fairly and consistently according to their role and their individual contribution to the Company and its performance. As a global Company, with the majority of our operations now outside South Africa, we expect our senior executives to have global experience. We therefore compete for talent in a global marketplace, and our approach to remuneration takes account of the need to be competitive throughout the various jurisdictions in which the Group operates.

To achieve external equity and competitive remuneration, Gold Fields uses surveys of peer group mining companies. During the year, Gold Fields contracted Mercer Consulting South Africa to provide a comprehensive analysis of the Group Executive Committee's remuneration. The study confirmed that the compensation of executives is in line with Gold Fields' position in the basket of comparative companies.

Gold Fields also provides, where appropriate, additional elements of compensation, including retirement savings, healthcare assistance, life and disability insurance, housing and personal accident cover.

The 2016 annual gross remuneration packages, or GRP, payable to the CEO, Nick Holland, and the CFO, Paul Schmidt, as determined the Remuneration Committee, were as follows:

- ▶ Nick Holland: R10,252,100 plus US\$390,000
- ▶ Paul Schmidt: R6,478,000 plus US\$119,000.

In addition to the GRP, each executive director is entitled, among other things, to benefits that comprise participation in the Gold Fields Long-Term Cash Incentive Plan; consideration of an annual incentive bonus based on the

fulfilment of certain targets set by the Board of Directors; and an expense allowance.

In 2015, the ratio of average executive director compensation vs average employee compensation was 21.3.

This ratio has reduced from 25.02 in 2014 as a result, among others, of the above inflationary wage increases received by our employees in South Africa in terms of three wage agreement reached in 2015 (p129).

**Short-term incentives (Annual bonus)**

Executive directors are eligible to earn performance bonuses of 60% of GRP for the CFO and 65% of GRP for the CEO for on-target performance, which comprise both

individual and strategic performance objectives as well as wider Group objectives. The annual bonus could increase above 60% and 65% respectively if the stretch target is achieved.

The Remuneration Committee sets targets for annual bonuses. In the case of the CEO and CFO, 65% of the performance bonus is based on Group objectives and the remainder is based on individual strategic objectives. For the regional Executive Vice-Presidents, bonuses are judged against Group, regional and operational objectives.

The on-target annual bonus parameters for the CEO, CFO and executive vice-presidents are set out below.

Role	Target earning potential as % of guaranteed remuneration	Bonus cap (stretch earning potential) as % of guaranteed remuneration
CEO	65	130
CFO	60	120
Executive vice-presidents	55	110

The bonus parameter objectives will be based on the drivers below and support the Group scorecard as reflected above. Other elements of the Group scorecard, not described below, are captured in the personal scorecards.

**Group scorecard parameters**

Safety	20%
Total gold production	20%
All-in Cost (AIC) per ounce	40%
Development or waste mined	20%

## 6.3 People – Remuneration and benefits (continued)

The CEO's 2016 annual performance bonus is made up of the bonus parameter objectives (65%) as stated in the table on the previous page and personal performance objectives (35%) as stated in the table below:

2016 performance scorecard for Gold Fields CEO Nick Holland		
Objective	Weighting	Measurement
1. Group free cash flow	10%	Deliver free cash flow margin of 5% based on a gold price of US\$1,100/oz and exchange rates of A\$0.73/US\$ and R14.14/US\$
2. South Deep cash flow	15%	Cash breakeven by year-end
3. South Deep rebase plan	25%	Conclude the rebase life-of-mine plan
4. Portfolio decisions on Damang and Darlot	20%	Decision on Darlot and Damang
5. Technology and innovation	10%	Technology and innovation strategy approved
6. Improve the quality of assets in the Gold Fields portfolio	20%	Grow mineable resources that maintain growth in FCF/oz and average reserve life per operation, through a combination of brownfields exploration and portfolio management (acquisition, joint venture and/or disposal)

### Individual performance targets

The CEO and CFO were also assessed on individual, strategic objectives (the CEO's performance scorecard is included in full in the Remuneration Report).

The CEO received a personal performance score of 4.2 out of 5 and the CFO received a personal performance score of 4.5 out of 5<sup>3</sup>. The aggregate bonus paid to members of the executive team in February 2016 was 109% of annual salary. For the CEO it was 111%<sup>1</sup> and the CFO 106%<sup>2</sup> of annual salary.

<sup>1</sup> CEO bonus = (65% x 170%) + (35% x 172%) x 65% = 111%

<sup>2</sup> CFO bonus = (65% x 170%) + (35% x 190%) x 60% = 106%

<sup>3</sup> Gets converted into a percentage with 3 = 100% and 5 = 200%. 4.2 = 172%, 4.5 = 190%

### Long-term incentives

The Company operates a Long-term Incentive Plan (LTIP) designed to encourage senior and key employees to identify closely with the long-term objectives of Gold Fields and allow them to participate in the future financial success of the Company.

In particular the LTIP is designed to:

- ▶ reward key senior managers for their performance and contribution to long-term sustainable financial results that drive shareholder value; and
- ▶ increase the alignment of executives and shareholders with the future growth and profitability of Gold Fields.

During 2015 the long-term incentives were governed by the 2014 LTIP – the salient features of this plan are:

- ▶ The LTIP is a three-year performance plan.
- ▶ Each performance cycle starts on 1 January of the first year and ends on 31 December of the third year.
- ▶ Annual awards will be made to eligible participants.
- ▶ Allocations will be based on the formula: Annual salary x applicable % by grade x personal performance.
- ▶ Vesting will be based on two corporate performance conditions equally being met:
  - Free cash flow margin 50% weighted
  - Total shareholder return 50% weighted

Threshold must be achieved for pay-out of any portion of the award to be triggered.

The Gold Fields Limited 2014 LTIP is set to be replaced with the revised Gold Fields Limited 2012 Share Plan, which requires shareholder approval at the 2016 Annual General Meeting.

On approval of the changes to the revised 2012 Share Plan, no new awards will be made under the 2014 LTIP. In the event that the 2012 Share Plan is not approved, annual long-term incentives will revert to the terms of the 2014 LTIP, with revised corporate performance conditions.

### Minimum shareholding requirement for executives

In line with best practice and in response to shareholder input, the Company has adopted a Minimum Shareholding Requirement policy that will become mandatory for executives. The policy requires executives to hold a specific percentage of shares in the Company. The proposed target shareholdings of vested and unencumbered shares for the relevant executives is:

- ▶ CEO: 200% of annual Guaranteed Remuneration Package (GRP); and
- ▶ CFO and other executives: 100% of annual GRP

The table below provides details of the remuneration of executive directors and prescribed officers in 2015, in terms of US Dollar values. An average exchange rate for the 12-month period ended 31 December 2015 was used: i.e. US\$1 = R12.68 to convert to US Dollar values.

### Non-executive directors' fees and executive directors' and prescribed officers' remuneration

The directors and prescribed officers were paid the following remuneration (US\$ terms) for the year ended 31 December 2015:

Fees and remuneration in US Dollars										
All figures stated in US\$'000	Board fees		Salary <sup>1</sup>	Pension scheme contribution	Annual bonus <sup>2</sup>	Sundry	Subtotal	Pre-tax share proceeds for shares awarded in previous years	Total realised earnings for the 12-month period ended 31 December 2015 <sup>3</sup>	For the 12-month period ended 31 December 2014
	Directors' fees	Committee fees								
<b>Executive directors</b>										
Nicholas J Holland	–	–	935.7	145.3	618.9 <sup>10</sup>	–	1,699.8	1,132.5	2,832.4	2,603.5
Paul A Schmidt	–	–	512.2	58.4	616.5	–	1,187.0	568.2	1,755.3	1,602.7
<b>Prescribed officers</b>										
Ernesto Balarezo <sup>4</sup>	–	–	622.4	–	425.7	414.8	1,463.0	109.4	1,572.4	1,970.4
Alfred Baku <sup>5</sup>	–	–	688.9	158.5	572.0	298.8	1,718.2	220.5	1,938.7	1,889.2
Richard Weston	–	–	560.9	64.5	482.0	–	1,107.4	688.6	1,796.0	1,506.5
Naseem A Chohan	–	–	283.0	53.1	306.9	–	643.0	221.4	864.4	726.6
Brett Mattison	–	–	347.1	38.4	379.3	–	764.8	207.7	972.6	851.3
Lee-Ann Samuel	–	–	307.7	33.8	322.1	–	663.6	175.4	839.0	807.1
Taryn Harmse	–	–	265.2	65.3	322.4	–	652.9	106.6	759.6	673.8
Nico Muller <sup>6</sup>	–	–	412.8	45.0	423.5	197.2	1,078.5	–	1,078.5	403.6
Avishkar Nagaser <sup>7</sup>	–	–	210.6	23.4	208.5	–	442.5	–	442.5	–
Willie Jacobsz <sup>8</sup>	–	–	–	–	–	–	–	–	–	1,034.4
Michael D Fleischer <sup>9</sup>	–	–	–	–	–	–	–	–	–	510.7
Kgabo FL Moabelo <sup>9</sup>	–	–	–	–	–	–	–	–	–	727.1
<b>Non-executive directors</b>										
Cheryl A Carolus	203.8	–	–	–	–	–	203.8	–	203.8	232.3
Alan R Hill	66.9	43.3	–	–	–	–	110.2	–	110.2	125.6
David N Murray	66.9	33.8	–	–	–	–	100.8	–	100.8	114.9
Richard P Menell	66.9	46.4	–	–	–	–	113.3	–	113.3	127.5
Gayle M Wilson	66.9	52.6	–	–	–	–	119.5	–	119.5	136.2
Donald MJ Ncube	66.9	46.4	–	–	–	–	113.3	–	113.3	129.2
Kofi Ansah	66.9	18.9	–	–	–	–	85.8	–	85.8	97.8
<b>Total</b>	<b>605.3</b>	<b>241.4</b>	<b>5,146.5</b>	<b>685.7</b>	<b>4,677.9</b>	<b>910.8</b>	<b>12,267.6</b>	<b>3,430.5</b>	<b>15,698.1</b>	<b>16,270.4</b>

Average exchange rates were US\$1 = R12.68 for FY2015 and R10.82 for FY2014 respectively

<sup>1</sup> The total US\$ amounts paid for 2015, and included under salary, were as follows: Nick Holland US\$356,000, Paul Schmidt US\$100,000

<sup>2</sup> The annual bonus accruals for the 12-month period ended 31 December 2015, paid in February 2016

<sup>3</sup> These amounts reflect the full directors' emoluments for comparative purposes. The portion of executive directors' emoluments payable in USD is paid in terms of agreements with the offshore subsidiaries for work done by directors offshore for offshore companies. The total realised earnings for 2015 for Nick Holland in ZAR = R35,914,615 and for Paul Schmidt = R22,256,668

<sup>4</sup> Ernesto Balarezo – Sundry payment relates to legislated bonuses

<sup>5</sup> Sundry payment for Alfred Baku relates to relocation/leave allowance and encashment of excess leave

<sup>6</sup> Nico Muller – Sundry payment relates to pro rata sign-on bonus

<sup>7</sup> Avishkar Nagaser – Appointed on 1 January 2015

<sup>8</sup> Willie Jacobsz – Prescribed officer until 31 December 2014

<sup>9</sup> Michael Fleischer and Kgabo Moabelo – Resigned during 2014

<sup>10</sup> Nick Holland elected, prior to the determination of the annual performance bonus for FY2015 and in line with the Rules of the Minimum Shareholding Requirement Policy, to convert 50% of his cash bonus into Gold Fields Shares (US\$618,900) which will be held in escrow for a five-year restricted period.

## 6.3 People – Remuneration and benefits (continued)

The directors and prescribed officers were paid the following remuneration (Rand terms) for the year ended 31 December 2015:

Fees and remuneration in Rands										
All figures stated in R'000	Board fees		Salary <sup>1</sup>	Pension scheme contribution	Annual bonus <sup>2</sup>	Sundry <sup>7</sup>	Subtotal	Pre-tax share proceeds for shares awarded in previous years <sup>11</sup>	Total realised earnings for the 12-month period ended 31 December 2015 <sup>3</sup>	For the 12-month period ended 31 December 2014
	Directors' fees	Committee fees								
<b>Executive directors</b>										
Nicholas J Holland	–	–	11,864.8	1,841.9	7,847.4 <sup>10</sup>	–	21,554.1	14,360.6	35,914.6	28,169.4
Paul A Schmidt	–	–	6,494.2	740.1	7,817.4	–	15,051.7	7,205.0	22,256.7	17,341.7
<b>Prescribed officers</b>										
Ernesto Balarezo <sup>4</sup>	–	–	7,892.6	–	5,398.3	5,260.0	18,550.9	1,387.2	19,938.1	21,319.2
Alfred Baku <sup>5</sup>	–	–	8,735.5	2,009.3	7,252.8	3,789.0	21,786.5	2,795.7	24,582.2	20,440.5
Richard Weston	–	–	7,112.1	817.9	6,112.1	–	14,042.1	8,731.8	22,773.9	16,296.9
Naseem A Chohan	–	–	3,588.2	673.3	3,891.9	–	8,153.4	2,807.5	10,961.0	7,861.1
Brett Mattison	–	–	4,401.3	487.1	4,809.8	–	9,698.2	2,634.0	12,332.2	9,212.1
Lee-Ann Samuel	–	–	3,901.1	429.2	4,084.0	–	8,414.3	2,224.3	10,638.5	8,732.3
Taryn Harmse	–	–	3,362.5	828.3	4,088.3	–	8,279.1	1,352.2	9,631.3	7,290.7
Nico Muller <sup>6</sup>	–	–	5,234.5	570.8	5,370.4	2,500.0	13,675.8	–	13,675.8	4,366.3
Avishkar Nagaser <sup>7</sup>	–	–	2,670.8	296.7	2,643.3	–	5,610.8	–	5,610.8	–
Willie Jacobsz <sup>8</sup>	–	–	–	–	–	–	–	–	–	11,191.9
Michael D Fleischer <sup>9</sup>	–	–	–	–	–	–	–	–	–	5,525.6
Kgabo FL Moabelo <sup>9</sup>	–	–	–	–	–	–	–	–	–	7,867.3
<b>Non-executive directors</b>										
Cheryl A Carolus	2,584.1	–	–	–	–	–	2,584.1	–	2,584.1	2,513.6
Alan R Hill	848.5	548.9	–	–	–	–	1,397.4	–	1,397.4	1,359.3
David N Murray	848.5	429.1	–	–	–	–	1,277.6	–	1,277.6	1,242.8
Richard P Menell	848.5	588.5	–	–	–	–	1,437.0	–	1,437.0	1,379.2
Gayle M Wilson	848.5	666.6	–	–	–	–	1,515.1	–	1,515.1	1,473.8
Donald MJ Ncube	848.5	588.5	–	–	–	–	1,437.0	–	1,437.0	1,397.9
Kofi Ansah	848.5	239.7	–	–	–	–	1,088.2	–	1,088.2	1,058.5
<b>Total</b>	<b>7,675.1</b>	<b>3,061.3</b>	<b>65,257.5</b>	<b>8,694.6</b>	<b>59,315.7</b>	<b>11,549.0</b>	<b>155,553.1</b>	<b>43,498.2</b>	<b>199,051.3</b>	<b>176,040.1</b>

Average exchange rates were US\$1 = R12.68 for the FY2015 and US\$1 = R10.82 for the FY2014 respectively

<sup>1</sup> The total US\$ amounts paid for 2015, and included in Salary, were as follows: Nick Holland US\$356,000, Paul Schmidt US\$100,000

<sup>2</sup> The annual bonus accruals for the 12 month period ended 31 December 2015, paid in February 2016

<sup>3</sup> These amounts reflect the full directors' emoluments for comparative purposes. The portion of executive directors' emoluments payable in US\$ is paid in terms of agreements with the offshore subsidiaries for work done by directors' offshore for offshore companies

<sup>4</sup> Ernesto Balarezo – sundry payment relates to legislated bonuses

<sup>5</sup> Alfred Baku – sundry payment relates to relocation / leave allowance and encashment of excess leave

<sup>6</sup> Nico Muller – sundry payment relates to pro rata sign-on bonus

<sup>7</sup> Avishkar Nagaser – appointed on 1 January 2015

<sup>8</sup> Willie Jacobsz – Prescribed Officer until 31 December 2014

<sup>9</sup> Michael Fleischer and Kgabo Moabelo – resigned during 2014

<sup>10</sup> Nick Holland elected, prior to the determination of the annual performance bonus for FY2015 and in line with the Rules of the Minimum Shareholding Requirement Policy, to convert 50% of his cash bonus into Gold Fields Shares (R7,847,652) which will be held in escrow for a five-year restricted period

## Assurance

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## 7.1 First party: Internal Audit statement

Gold Fields Internal Audit (GFIA) is an independent assurance provider to the Gold Fields Audit Committee on the effectiveness of the risk management, control and governance processes within Gold Fields. The risk-based annual audit plan covers the breadth and depth of the Gold Fields value chain, and is approved by the Audit Committee annually.

Internal audit activities are conducted in terms of the annually approved mandate provided by the Audit Committee and executed either by a team of appropriate, qualified and experienced internal auditors, or through the engagement of external practitioners on specified and agreed terms. The Internal Audit team is based in South Africa and services all the Gold Fields operations globally. The Vice-President and

Group Head of Internal Audit provides quarterly feedback to the Audit Committee and has a functional reporting line to the Audit Committee Chair.

GFIA follows a risk-based audit methodology, which is in compliance with the Institute of Internal Auditors (IIA) and the International Standards for the Professional Practice of Internal Auditing. Furthermore, GFIA operates a quality assurance programme that involves performing detailed quality review assessments at an activity and functional level.

Based on the work performed by GFIA during the year, the Vice-President and Group Head of Internal Audit have presented the Audit Committee with an assessment of the effectiveness of the Company's systems of internal control and risk

management, internal financial controls as well as the IT control framework. It is GFIA's opinion that the internal control environment and risk management processes are adequate within the Gold Field business and provide reasonable assurance that the objectives of Gold Fields will be met. This GFIA assessment forms one of the bases of the Audit Committee's recommendation in this regard to the Board.

**Shyam Jagwanth**

*Vice-President and Group Head of Internal Audit*

Johannesburg  
South Africa

22 March 2016

## 7.2 Independent Assurance Provider's Report to the Directors of Gold Fields Limited

### Report on Selected Sustainability Performance Information

We have undertaken an assurance engagement on selected sustainability performance information, as described below, and presented in the Integrated Annual Report of Gold Fields Limited (Gold Fields) for the year ended 31 December 2015 (the Report). This engagement was conducted by a multi-disciplinary team of health, safety, social, environmental and assurance specialists with extensive experience in sustainability reporting.

*Subject matter (presented in compliance with subject matter 4 of the International Council of Mining and Metals' (ICMM) Sustainable Development Framework: Assurance Procedure).*

We are required to provide reasonable assurance on the selected sustainability performance information set out in the table below. The selected sustainability performance information described below has been prepared in accordance with Gold Fields' reporting criteria that accompanies the selected sustainability performance information on pages 143 to 146 (the accompanying Gold Fields reporting criteria).

Reasonable Assurance (RA)	Unit
<b>Environment</b>	
Total CO <sub>2</sub> equivalent emissions, Scope 1 – 3	Tonnes CO <sub>2</sub> e
Total energy consumed (GJ)/ounce of gold produced	Total GJ of energy consumed per ounce of gold produced
Total energy consumed (GJ)/total tonnes mined	Total GJ of energy consumed per tonne mined
Number of environmental incidents – Level 3 and above	Number
Electricity	MWh
Diesel	kℓ
Total water withdrawal	mℓ
Total water recycled/re-used per annum	mℓ
Water intensity	kℓ withdrawn per ounce of gold produced
<b>Health</b>	
Number of cases of silicosis reported	Number of cases
Number of cases of noise induced hearing loss reported	Number of cases
Number of new cases of cardio respiratory tuberculosis reported	Number of new cases
Number of cases of malaria tested positive per annum	Number of positive cases
Number of South African and West African employees in the highly active anti-retroviral therapy (HAART) programme	Number of employees
Percentage of South African and West African workforce on the voluntary counselling and testing (VCT) programme	Percentage of workforce
<b>Safety</b>	
Total recordable injury frequency rate (TRIFR)	Rate
Number of fatalities	Number
<b>Social</b>	
Total socio economic development (SED) spend in US dollars	US Dollars

## 7.2 Independent Assurance Provider's Report to the Directors of Gold Fields Limited (continued)

Reasonable Assurance (RA)	Unit
<b>Mining Charter</b>	
Percentage historically disadvantaged South Africans (HDSA) in management who are classified as designated groups and who are employed at management levels (top management (Board), senior, middle, junior, core skills and total), including and excluding corporate and including and excluding white females	Top management %
	Senior %
	Middle %
	Junior %
	Core %
	Total %
Number of houses built as part of home ownership scheme	Number of houses
Maintenance of the conversion rate of hostels to ensure an occupancy rate of one person per room	Number of people per room
Percentage conversion of hostels to family units	Percentage
Human Resource Development (HRD) Expenditure as a percentage of total annual payroll (excluding mandatory skills levy)	Percentage
Number of bursaries/scholarships provided	Number of bursars/scholars
Research and Development initiatives supported (total number, percentage of South African Institutions in the total and expenditure)	Number
	Percentage
	Rand value
Rand value spent on Local Economic Development (LED) projects in the SLP in the current reporting year	Rand value
Total procurement spend from BEE entities (BBSEEC, 2010)	Rand value
Procurement spend from BEE entities (in line with the Mining Charter categories of capital goods, services & consumable goods)	% Capital goods
	% Services
	% Consumable goods
Annual spend on procurement from multi-national suppliers: Contribution to the social fund	Percentage
Percentage of samples sent to South African facilities	Percentage
Implementation of approved Environmental Management Plans (EMPs) (defined as per the categories contained in the on-line Mining Charter submission template to the DMR)	Percentage
Implementation of the tripartite action plan on health and safety (defined as per the categories contained in the on-line Mining Charter submission template to the DMR)	Percentage



### Directors' responsibilities

The Directors are responsible for the selection, preparation and presentation of the selected sustainability performance information in accordance with the accompanying Gold Fields reporting criteria. This responsibility includes the identification of stakeholders and stakeholders' requirements, material issues, for commitments with respect to sustainability performance and for the design, implementation and maintenance of internal control relevant to the preparation of the Report that is free from material misstatement, whether due to fraud or error.

### Our independence and quality control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

KPMG Services Proprietary Limited applies the International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Our responsibility

Our responsibility is to express an opinion on the selected sustainability performance information based on the evidence we have obtained.

We have conducted our engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements Other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance

Standards Board. That Standard requires that we plan and perform our engagement to obtain reasonable assurance about whether the selected sustainability performance information is free from material misstatement.

A reasonable assurance engagement in accordance with ISAE 3000 involves performing procedures to obtain evidence about the quantification of the selected sustainability performance information and related disclosures. The nature, timing and extent of procedures selected depend on the practitioner's judgement, including the assessment of the risks of material misstatement, whether due to fraud or error. In making those risk assessments we considered internal control relevant to Gold Fields' preparation of the selected sustainability performance information. A reasonable assurance engagement also includes:

- › Assessing the suitability in the circumstances of Gold Fields' use of the accompanying Gold Field Reporting criteria as the basis for preparing the selected sustainability performance information;
- › Evaluating the appropriateness of quantification methods and reporting policies and internal guidelines used, and the reasonableness of estimates made by Gold Fields; and
- › Evaluating the overall presentation of the selected sustainability performance information and whether the information presented in the Report is consistent with our findings, overall knowledge and experience of sustainability management and performance at Gold Fields.

Our work included the following evidence-gathering procedures:

- › Interviewing management and senior executives to obtain an understanding of the internal control environment, risk assessment process and

information systems relevant to the sustainability reporting process. Inspecting documentation to corroborate the statements of management and senior executives in our interviews.

- › Testing the processes and systems to generate, collate, aggregate, monitor and report the selected sustainability performance information.
- › Inspecting supporting documentation and performing analytical procedures on a sample basis to evaluate the data generation and reporting processes against the reporting criteria.
- › Undertaking physical site visits to Gold Fields' South Deep, Tarkwa and Damang operations and remote reviews of the Granny Smith, St Ives, Agnew/Lawlers, Darlot, and Cerro Corona operations.

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

### Opinion

In our opinion, the selected sustainability performance information set out in the subject matter paragraph for the year ended 31 December 2015 is prepared, in all material respects, in accordance with the accompanying Gold Fields reporting criteria.

### Comparability

Our report includes the provision of assurance on the Research and Development initiatives supported (Total Number, Percentage of South African Institutions in the total and Expenditure), Annual spend on procurement from multi-national suppliers: Contribution to the social fund (percentage), Implementation of Approved EMP's (percentage), Implementation of the tripartite action plan on health and safety (percentage), and Total Energy Consumed (GJ)/Total Tonnes mined.

## 7.2 Independent Assurance Provider's Report to the Directors of Gold Fields Limited (continued)

We were previously not required to provide assurance on this selected sustainability performance information.

### Report on the ICMM assurance procedure

We are required to report our findings on the International Council of Mining and Metals' (ICMM) Sustainable Development (SD) Framework: Assurance Procedure (ICMM Assurance Procedure) in respect of:

- ▶ The alignment of Gold Fields' sustainability policies to the ICMM 10 SD Principles and any mandatory requirements set out in ICMM Position Statements (ICMM Subject Matter 1).
- ▶ The reporting of Gold Fields' material sustainable development risks and opportunities based on a review of its business and the views and expectations of its stakeholders (ICMM Subject Matter 2).
- ▶ The implementation of systems and approaches that Gold Fields is using to manage its material safety risks and opportunities (ICMM Subject Matter 3).

### Directors' responsibilities

The Directors are responsible for:

- ▶ The alignment of Gold Fields' sustainability policies to the ICMM 10 SD Principles and any mandatory requirements set out in ICMM Position Statements.
- ▶ The reporting of Gold Fields' material sustainable development risks and opportunities based on a review of its business and the views and expectations of its stakeholders.
- ▶ The implementation of systems and approaches that Gold Fields is using to manage its material safety risks and opportunities.

### Our responsibility

Our engagement included reporting on the ICMM Assurance Procedure in respect of 1, 2 and 3 above based on the knowledge obtained in our evidence gathering procedures in our

assurance engagement on the selected sustainability performance information set out in the subject matter paragraph in our 'Report on Selected Sustainability Information' on pages 139 and 140.

### Findings

Based on our evidence gathering procedures in our assurance engagement for the year ended 31 December 2015 on the subject matter set out in our 'Report on Selected Sustainability Information' 139 and 140, nothing has come to our attention that causes us to believe that:

- ▶ Gold Fields' sustainability policies are not aligned with the ICMM 10 SD Principles and any mandatory requirements set out in ICMM Position Statements.
- ▶ Gold Fields has not reported material sustainable development risks and opportunities based on a review of its business and the views and expectations of its stakeholders.
- ▶ Gold Fields has not implemented systems and approaches to manage its material safety risks and opportunities.

### Other matters

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

### Restriction of liability

Our work has been undertaken to enable us to express the opinions on the sustainability performance information set out in the subject matter paragraph in our 'Report on Selected Sustainability performance Information' together with findings on 1, 2 and 3 in our 'Report on the

ICMM Assurance Procedure' to the Directors of Gold Fields in accordance with the terms of our engagement, and for no other purpose. We do not accept or assume liability to any party other than Gold Fields, for our work, for this report, or for the conclusions we have reached.

### KPMG Services Proprietary Limited



Per PD Naidoo  
Director

22 March 2016



Per C Basson  
Director

22 March 2016

### KPMG Crescent

85 Empire Road  
Parktown  
Johannesburg  
2193

## 7.3 Key sustainability performance data

The following key sustainability performance information was selected by Gold Fields, for assurance by KPMG in 2015 which have been reported in accordance with the criteria listed in the table below.

Parameter	Level of assurance	Management figure
<b>Selected sustainability performance information presented in accordance with Subject Matter 4 of the International Council of Mining and Metals' (ICMM) Sustainable Development Framework: Assurance Procedure (ICMM Assurance Procedure), and prepared in accordance with the Global Reporting Initiative (GRI) G4 Guidelines as well as Gold fields own internal Guidelines:</b>		
<b>Environment</b>		
Total CO <sub>2</sub> equivalent emissions, scope 1– 3 (in tonnes)	Reasonable	1 753 163 tonnes
Electricity (MWh)	Reasonable	1 322 353 MWh
Number of environmental incidents – Level 3 and above	Reasonable	5 incidents
Total water withdrawal (mℓ)	Reasonable	35 247 mℓ
Diesel (kℓ)	Reasonable	192 517 kℓ
Total water recycled/re-used per annum (mℓ)	Reasonable	43 120 mℓ
Water intensity (kℓ withdrawn per ounce of gold produced)	Reasonable	35 247 100 kℓ/2 235 560 = 15.77
Total energy consumed (GJ)/total tonnes mined	Reasonable	11 240 369/165 787 013 = 0.07
Total energy consumed (GJ)/ounce of gold produced	Reasonable	11 240 369/2 235 560 = 5.02
<b>Health</b>		
Number of cases of silicosis reported	Reasonable	9 cases
Number of cases of noise induced hearing loss reported	Reasonable	6 cases
Cardio respiratory tuberculosis (number of new cases reported)	Reasonable	36 cases
Number of cases of malaria tested positive per annum	Reasonable	532 positive cases
Number of South African and West African employees in the HAART programme (cumulative)	Reasonable	315
Percentage of South African and West African workforce on the voluntary counselling and testing (VCT) programme	Reasonable	4 675 people on VCT/12 600 people = 37%

## 7.3 Key sustainability performance data (continued)

Parameter	Level of assurance	Management figure
<b>Safety</b>		
TRIFR <sup>1</sup>	Reasonable	174 TRIs/51 198 901 man hours = 3.40
Number of fatalities	Reasonable	3 <sup>2</sup>
<b>Social</b>		
Total socio-economic development (SED) spend in US Dollars <sup>3</sup>	Reasonable	US\$13 655 549

<sup>1</sup> Per million hours worked, including employees and contractors

<sup>2</sup> In addition to the three mining related fatalities, on 7 August 2015 a G4S Security Services Contractor, Sbogiseni Cornwell Ngqoleka, was tragically killed during what appears to have been an armed robbery targeting copper cable at South Deep Mine.

<sup>3</sup> Our SED definition has been aligned to the World Gold Council definition, which excludes employee-related SED spend, and includes the SED spend from the South Deep Education and Community Trusts as well as the Community Westonaria Trust.

Parameter	Level of assurance	Management figure	
<p>The following key sustainability performance information was selected by Gold Fields, for assurance by KPMG in 2015, which have been reported in accordance with the following criteria: 1) Selected Mining Charter elements prepared in compliance with the Broad-Based Socio-Economic Empowerment Charter for the South African Mining and Minerals Industry (BBSEEC) (2002) and related Scorecard (2004); and 2) Selected Mining Charter elements prepared in compliance with the Amendment to the BBSEEC (2010) and related scorecard (2010) for the South African Mining and Minerals Industry.</p>			
<b>Mining Charter</b>			
<b>Employment Equity</b>			
Percentage HDSA in management <sup>4</sup> who are classified as designated groups and who are employed at management levels: top management (Board), senior, middle, junior, core skills and total. Core skills include A, B and C graded employees in the miner and artisan categories as well as officials that are deemed to have core skills in mining	Reasonable	<p><b>Including corporate and including white females</b></p> <p>Top: 42%<sup>5</sup></p> <p>Senior: 47%</p> <p>Middle: 60%</p> <p>Junior: 56%</p> <p>Core: 69%</p> <p>Total: 67%</p> <p><b>Excluding corporate and excluding white females</b></p> <p>Top: 50%</p> <p>Senior: 40%<sup>6</sup></p> <p>Middle: 51%</p> <p>Junior: 51%</p> <p>Core: 67%</p> <p>Total: 66%</p>	<p><b>Excluding corporate and including white females<sup>7</sup></b></p> <p>Top: 50%</p> <p>Senior: 50%<sup>6</sup></p> <p>Middle: 57%</p> <p>Junior: 54%</p> <p>Core: 70%</p> <p>Total: 69%</p> <p><b>Including corporate and excluding white females</b></p> <p>Top: 33%<sup>8</sup></p> <p>Senior: 35%</p> <p>Middle: 45%</p> <p>Junior: 50%</p> <p>Core: 66%</p> <p>Total: 64%</p>

<sup>4</sup> Excludes contractors.

<sup>5</sup> Includes the Gold Fields Ltd and South Deep Joint Venture Board members.

<sup>6</sup> Includes both SA Regional ExCo (RexCo) members and the South Deep mine executive members (ExCo).

<sup>7</sup> Reportable in terms of the BBSEEC (2010).

<sup>8</sup> Includes the Gold Fields Ltd and South Deep Joint Venture Board members.

Parameter	Level of assurance	Management figure
<b>Housing and Living Conditions</b>		
Maintenance of the conversion rate of hostels to ensure an occupancy rate of 1 person per room	Reasonable	1 person per room
Number of houses built as part of home ownership scheme	Reasonable	0 <sup>9</sup>
% conversion of hostels into family units	Reasonable	100%
<p><sup>9</sup> The Home Ownership Scheme embraces facilitating access to accommodation for our employees. Construction of 150 houses is progressing well and will be completed by end Q2 2016. South Deep owns 258 houses and purchased 198 from Sibanye in 2014 (transfer still in progress) and 489 have been rented from third parties by Gold Fields for our employees. The mine will make available 102 of the South Deep owned houses during Q2 2016, to be sold to employees. Furthermore, South Deep's compliance with the Mining Charter Scorecard element for 'Housing and Living Conditions', ensured the conversion of hostels to one occupant per room and created availability of 203 family units in 2014.</p>		
<b>Skills and Development</b>		
HRD expenditure as a percentage of total annual payroll (excluding mandatory skills development levy)	Reasonable	10.50%
Number of bursaries/scholarships provided	Reasonable	21
Research and development initiatives supported (total number, percentage of South Africa institutions in the total and expenditure)		0 <sup>10</sup>
<b>Local Economic Development</b>		
Rand value spent on LED projects in the SLP in the current reporting year	Reasonable	R3 160 657
<b>Procurement and Enterprise Development</b>		
Procurement spend from BEE entities (in line with the mining charter categories of capital goods, services & consumable goods)	Reasonable	Capital goods: 87.7% Services: 78.6% Consumable goods: 84.0%
Total procurement spend from BEE entities (BBSEEC, 2010)	Reasonable	Total procurement spend: R1 993 284 157 BEE procurement spend: R1 667 868 613
Annual spend on procurement from multi-national suppliers: Contribution to the social fund	Reasonable	0 <sup>11</sup>

<sup>10</sup> There were no reportable Research and Development Initiatives supported during 2015.

<sup>11</sup> There remains an industry-wide lack of clarity on this requirement in the absence of guidance from the DMR. Although no annual spend, in terms of multi-national's contributions to a social fund is reportable, South Deep has commenced and implemented several projects in 2015 focused on enhancing host community procurement, employment and skills development.

## 7.3 Key sustainability performance data (continued)

Parameter	Level of assurance	Management figure
<b>Sustainable Development and Growth</b>		
Percentage % of samples in South African facilities	Reasonable	100%
Implementation of approved EMP's (defined as per the categories contained in the on-line Mining Charter submission template to the DMR)	Reasonable	100%
Implementation of the tripartite action plan (TAP) on health and safety (defined as per the categories contained in the on-line Mining Charter submission template to the DMR)	Reasonable	69% <sup>12</sup>

<sup>12</sup> 100% implementation was achieved on three of the five pillars of the TAP. Further work is being undertaken on the remaining two pillars: training of occupational health and safety representatives as well as implementing the cultural transformation framework standards in 2016.

# Administration and corporate information

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 ISIN – ZAE 000018123

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## DIRECTORS

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 NJ Holland \*\* (Chief Executive Officer)  
 PA Schmidt • (Chief Financial Officer) K Ansah #  
 AR Hill ° DN Murray ° DMJ Ncube ° SP Reid ^ GM Wilson °

^ Australian \* British # Ghanaian ° Canadian  
 ° Independent Director • Non-independent Director

# Forward looking statements

*This report contains forward looking statements within the meaning of section 27A of the U.S. Securities Act of 1933, as amended, or the Securities Act, and section 21E of the U.S. Securities Exchange Act of 1934, as amended, or 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 and income of Gold Fields, wherever they may occur in this report and the exhibits to the 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 report. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward looking statements include, without limitation:*

- › overall economic and business conditions in South Africa, Ghana, Australia, Peru and elsewhere;
- › changes in assumptions underlying Gold Fields' mineral reserve estimates;
- › the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions;
- › the ability to achieve anticipated cost savings at existing operations;
- › the success of the Group's business strategy, development activities and other initiatives;
- › the ability of the Group to comply with requirements that it operate in a sustainable manner and provide benefits to affected communities;
- › decreases in the market price of gold or copper;
- › the occurrence of hazards associated with underground and surface gold mining or contagious diseases at Gold Field's operations;
- › the occurrence of work stoppages related to health and safety incidents;
- › loss of senior management or inability to hire or retain employees;
- › fluctuations in exchange rates, currency devaluations and other macroeconomic monetary policies;
- › the occurrence of labour disruptions and industrial actions;
- › power cost increases as well as power stoppages, fluctuations and usage constraints;
- › supply chain shortages and increases in the prices of production imports;
- › 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;
- › the adequacy of the Group's insurance coverage;
- › the manner, amount and timing of capital expenditures made by Gold Fields on both existing and new mines, mining projects, exploration project or other initiatives;
- › changes in relevant government regulations, particularly labour, environmental, tax, royalty, health and safety, water, regulations and potential new legislation affecting mining and mineral rights;
- › fraud, bribery or corruption at Gold Field's operations that leads to censure, penalties or negative reputational impacts; and
- › political instability in South Africa, Ghana, Peru or regionally in Africa or South America.

*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 report or to reflect the occurrence of unanticipated events.*







**GOLD FIELDS**

