

Harmony, a gold mining and exploration company with more than six decades of experience, has operations in South Africa – one of the world’s best known gold mining regions – and in Papua New Guinea – one of the world’s premier new gold regions. In FY15, Harmony was the third largest gold producer in South Africa and the twelfth largest in the world. At Harmony, we understand the impact that our company has on the lives of the people we employ, the communities that surround our mines and the environment, as well as the economic contribution that we make to the countries in which we operate.

## OUR WEBSITE

In this report we have included references to additional information on certain sections, either in the report itself or online.

Go to [www.harmony.co.za](http://www.harmony.co.za) and click on the investor tab where you will find a more detailed account of the environmental, socio-economic and governance aspects of Harmony’s business for FY15.



The QR code link will take you to information suitable to view on your mobile device. Download an application for your phone, take a picture of the code and the relevant page will open in your browser window.

## REFERENCE

A full glossary of terms is available on page 222.

Throughout this report, “\$” or “dollar” refers to US dollar, unless otherwise stated.

“K” refers to kina, the currency of Papua New Guinea.

“Moz” refers to million ounces.

All production volumes are in metric tonnes (t) unless specifically stated as imperial tons.

# OUR VALUES

Our values are at the core of all we do – they underpin all our actions and are built into the design of our business.

## WE MEASURE OURSELVES AGAINST THESE IN EVERYTHING WE DO AND ASK FOR.



## SAFETY

No matter the circumstances, safety is our main priority



## ACCOUNTABLE

We are all accountable for delivering on our commitments



## ACHIEVEMENT

Achievement is core to our success



## CONNECTED

We are all connected as one team



## HONESTY

We uphold honesty in all our business dealings and communicate openly with stakeholders



[www.harmony.co.za](http://www.harmony.co.za)

## KEY HIGHLIGHTS

### REVENUE

# R15.4bn

(FY14: R15.7bn)

### SAFETY IMPROVED

# FIFR: 0.11

(FY14: 0.26 per million hours worked)

### SOLID BALANCE SHEET

# FUNDING OUR OWN CAPITAL

### MAJOR COPPER-GOLD PROJECT: GOLPU

# IN FEASIBILITY STAGE

### ACCOMMODATION

# EACH EMPLOYEE IN HOSTEL HAS OWN ROOM



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### HARMONY IN NUMBERS

Our annual financial statements are presented in full in the Financial Report 2015 which is available at [www.har.co.za/15/download/HAR-FR15.pdf](http://www.har.co.za/15/download/HAR-FR15.pdf)



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# ABOUT THIS REPORT

Our Integrated Annual Report 2015 tells the story of Harmony Gold Mining Company Limited (Harmony) for our 2015 financial year (FY15), from 1 July 2014 to 30 June 2015. This report is not limited to this time period and also addresses certain comparative historical information where this is relevant and provides some insight into how we envisage our future.

In this report we aim to show readers what Harmony has done and achieved, what we plan to do and achieve in the future and how we intend to get there. The report reflects on our journey in FY15 – we explain our external and internal environments, our strategy and business model, together with our objectives and how we performed against these. For the purpose of integrated reporting, we have defined our readers as the primary providers of financial capital – that is shareholders. But, we understand that other stakeholders have a deep and vested interest in our company, and we have tried to address their interests and concerns where it has been possible and appropriate to do so.

Our company is built on the strength of our actions. This report examines the way in which we acted on our strategy in the past year, and the effects this has had on our business, our relationships and our prospects. This report has been compiled through conversations with a number of stakeholders so that it addresses and captures our full story. We have included extensive feedback from stakeholders and have highlighted key actions by Harmony during the year that showcase our commitment to our values and strategy, our integrated thinking and how we are mitigating key risks. The highlighting of noteworthy actions allows us to bring our reporting alive and provides insight into the Harmony story. A consistent thread throughout this report is the way in which we address our most material risks and issues.

This report covers all of Harmony's wholly-owned operations in South Africa as well as its joint venture and own exploration activities in Papua New Guinea. Discontinued operations have been excluded unless otherwise stated. In addition, this report details the environmental, socio-economic and governance aspects of these operations, and Harmony as a whole. A separate notice of annual general meeting with summarised financial statements is posted to shareholders and is available on our website.

For the purposes of this report we define the short, medium and long term as follows:

Short term – six months to a year

Medium term – one year to three years

Long term – longer than three years

In addition to this report, Harmony produces an annual report prepared on a Form 20-F, filed with the United States Securities and Exchange Commission, in compliance with the listing requirements of the New York Stock Exchange. Copies of this will be available from 23 October 2015, free of charge on the Electronic Data Gathering, Analysis and Retrieval system at [www.sec.gov](http://www.sec.gov) and on our website. In an effort to align the Form 20-F with the Integrated Report, we have included relevant information from the Form 20-F in this report. Any additional information can be found on our website at [www.harmony.co.za/investors](http://www.harmony.co.za/investors). This integrated report has been developed in line with the International Integrated Reporting Council Framework, the Global Reporting Initiative G4 guidelines and the King III Report on Governance for South Africa. The full Global Reporting Initiative index is available on pages 210 to 218.

In addition, our annual financial statements, including the summarised consolidated statements, have been prepared in accordance with the International Financial Reporting Standards as issued by the International Accounting Standards Board, the SAICA Financial Reporting Guideline as issued by the Accounting Practice Committee, Financial Pronouncements as issued by the Financial Reporting Standards Council, the South African Companies Act 71 of 2008, as amended (Companies Act) and the JSE Listings Requirements. For ease of reference, Harmony's audited annual financial statements are available in a separate report, the Financial Report 2015, which is also available online at [www.harmony.co.za/investors/reporting/annual-reports](http://www.harmony.co.za/investors/reporting/annual-reports).

Everything we do, from risk assessment and decision making to reporting, is informed by our understanding of how various elements of the business fit together. We have applied this approach to this report as well – it is a fully integrated document that gives insight into both our financial and non-financial performance. Summarised information on mineral resources and reserves appears on pages 159 to 167, with comprehensive information available in the report entitled Mineral Resources and Mineral Reserves 2015, which is available online at [www.harmony.co.za/investors/reporting/annual-reports](http://www.harmony.co.za/investors/reporting/annual-reports). The resource and reserve statements have been compiled in accordance with the South African Code for Reporting of Exploration Results, Mineral Reserves and Mineral Resources, the Australian Code for Reporting of Mineral Resources and Mineral Reserves, Industry Guide 7 of the United States' Securities and Exchange Commission and the JSE Listings Requirements. This information was gathered, reviewed and confirmed by the relevant competent persons. No restatements were made in the 2015 financial year.

At Harmony we acknowledge that this report is made meaningful by ensuring that the information contained in it is accurate and appropriate. As in previous years, this report has had its most material key performance indicators assured by PricewaterhouseCoopers Inc. A copy of their assurance report is available on page 204 of this report.

## FEEDBACK

Our reporting, and the activities that it discusses, can be improved through feedback. As a result, if you have any comments or suggestions on this report, send them to our investor relations team: [HarmonyIR@harmony.co.za](mailto:HarmonyIR@harmony.co.za).

## DIRECTORS' RESPONSIBILITY FOR THE INTEGRATED ANNUAL REPORT 2015

Our board of directors has read and considered this annual report, and signed it off on 23 October 2015.

# ABOUT HARMONY

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# WHO HARMONY IS

**"HARMONY UNDERSTANDS THAT LONG-TERM VALUE IS ABOUT MORE THAN THE GOLD WE PRODUCE AND THE PROFITS WE MAKE."**

Harmony, a gold-mining and exploration company, has operations in South Africa and Papua New Guinea, one of the world's best-known gold mining regions and one of the world's premier new gold regions respectively. Harmony, which has more than six decades of experience, was South Africa's third largest gold producer and the twelfth largest in the world in FY15.

At Harmony, we understand the significant impact our company has on the lives of people, on the communities that surround our mines, on the environment, and on the economic well-being of the countries in which we operate.

**We measure, we measure up and we deliver.**

## OUR OPERATIONS AND PROJECTS

In South Africa, our operations are focused on the world-renowned Witwatersrand Basin, as well as the Kraaipan Greenstone Belt. We operate nine underground mines, one open-pit mine and several surface operations.

Our operations in Papua New Guinea form part of a 50:50 joint venture with Newcrest Mining Limited. These operations include the Hidden Valley open-pit gold and silver mine, the Golpu project in Morobe Province and significant exploration tenements. In addition to its joint ventures, Harmony also has a wholly-owned exploration portfolio that focuses on highly prospective areas in Papua New Guinea.

In FY15, our South African operations accounted for 91% of our total production of 1.08Moz, with the remaining 9% coming from Papua New Guinea. At the same time, our South African holdings represented 64% of our mineral resource base, while those in Papua New Guinea represented 36%.

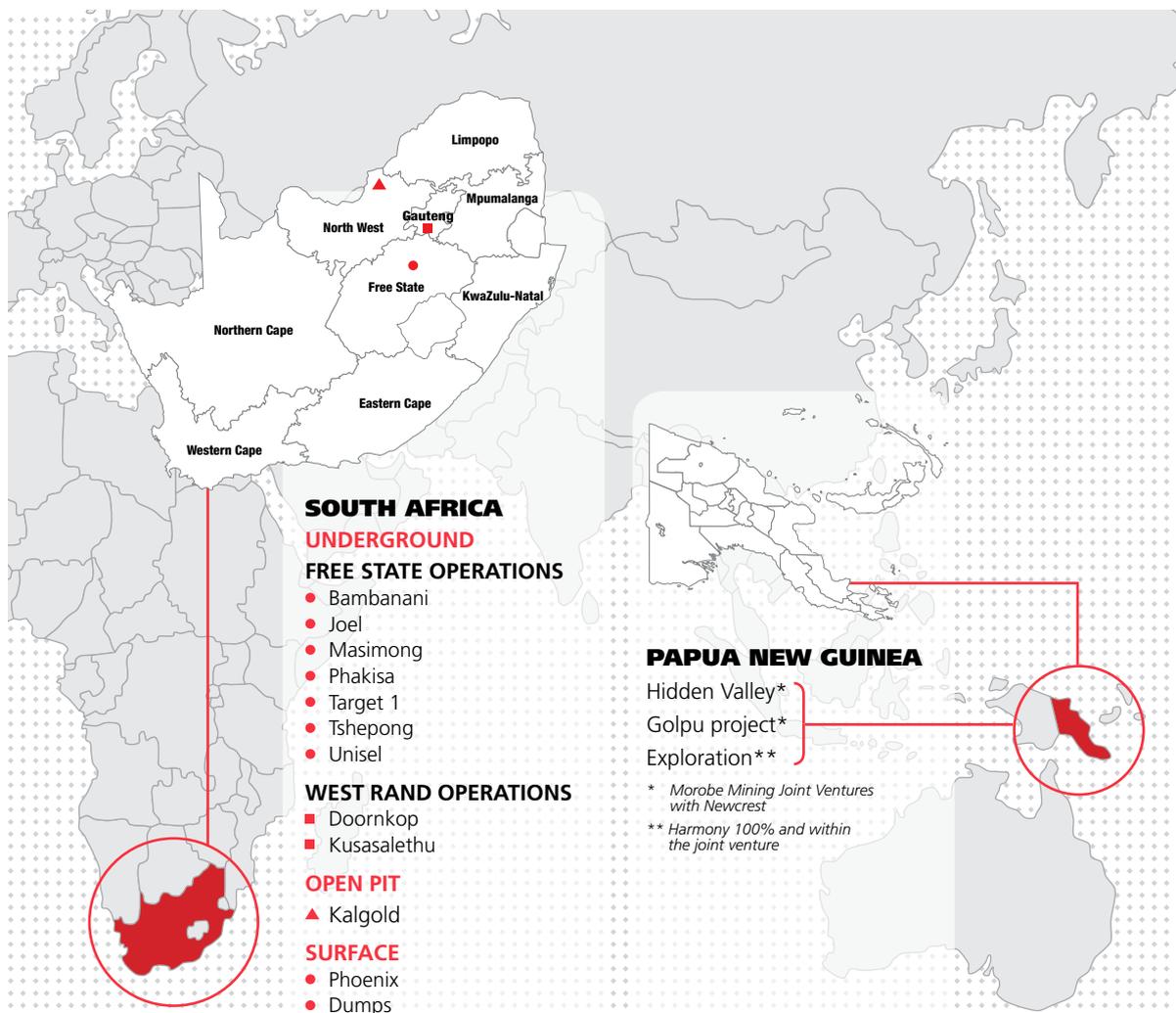
Looking ahead, the Golpu project is expected to be a game-changer for Harmony. This project is among the best gold-copper porphyries in south-east Asia. On 15 December 2014, Harmony's board approved the updated prefeasibility study for this project and agreed to progress it to feasibility study stage. The updated prefeasibility study entails low development capital cost, targets high grades to maximise free cash flow generation and demonstrates the potential of this world-class ore body.

The updated prefeasibility study supports our view that Golpu is a spectacular ore body with a large copper component and that it is affordable and mineable. Key objectives of the study – to reduce the capital cost of the project and lower operating costs so as to improve returns on capital – have been achieved. For more information refer to page 156 in this report.



Phakisa mine

# WHERE WE OPERATE



**HARMONY IN FY15**

**1.08Moz** **31 114** **42.6Moz** **110.3Moz** **R15.4 billion**  
**GOLD PRODUCED** **PEOPLE EMPLOYED** **MINERAL RESERVES** **MINERAL RESOURCES** **REVENUE**

# WHO HARMONY IS CONTINUED

## OUR PEOPLE

Our company delivers long-term benefits to a broad range of stakeholders. We rely on experienced, skilled teams who live our values and play their role in maintaining stakeholder relationships, growing profits and maintaining a sustainable company.

At the end of FY15, Harmony employed 31 114 people in total – 26 000 employees and 5 012 contractors in South Africa and 75 employees and 27 contractors in Papua New Guinea (excluding employees of the Morobe Mining Joint Ventures). Our employees are drawn from communities around our operations, and from other provinces in South Africa and other southern African countries.

Our corporate offices are located in Randfontein, South Africa, close to some of our South African operations, while our south-east Asia office is located in Brisbane, Queensland, Australia.

The company is governed by a board of directors which brings together a range of skills and experience and whose members are committed to maintaining the highest levels of corporate governance. In turn, the directors entrust the management of Harmony to skilled management teams which work towards ensuring that the company remains sustainable, towards improving margins and towards increasing the value of our assets in Papua New Guinea. For more on our board and management see page 28.

## OUR VALUES AND THEIR ROLE IN CREATING VALUE

Harmony lives its values – safety, being accountable, achievement and being connected and honest. These are the compass points for our actions, ensuring that, in addition to achieving our strategic goals, we seek to make the right decisions and support the members of our teams in doing so. These values are ingrained in our training initiatives and decision-making processes, ensuring that they are at the front of employees' minds and actions. Our values extend beyond our operations' gates. They guide our interactions with external stakeholders, from shareholders and the media to local communities and those from which our employees are drawn. Our hope is that through a commitment to these values, we can build a company with which people want to be associated and which will generate shared value into the future.

As a company, Harmony understands that long-term value is about more than the gold we produce and the profits we make. These are fundamental to our ability to create value in the broadest sense, but our worth is better reflected in the impact we have on the lives of people, now and in the future.



*Masimong underground*

## OUR SHAREHOLDERS

Harmony is listed on the Johannesburg Stock Exchange and on the New York Stock Exchange. The company's shares are quoted in the form of American Depositary Receipts on the New York Stock Exchange and as International Depositary Receipts on the Berlin exchange.

## OUR AWARDS

In FY15, Harmony was once again admitted to the Johannesburg Stock Exchange's Socially Responsible Investment Index, as we have been since inception of that index. Our Integrated Annual Report FY14 received an African Gold Quill Award from the International Association of Business Communicators for excellence in the communication skills category. The award acknowledged our move away from printed to web-based reporting, an initiative aimed at making our reports more easily accessible to all stakeholders, decreasing our corporate costs and reducing the amount of paper consumed in the printing process.

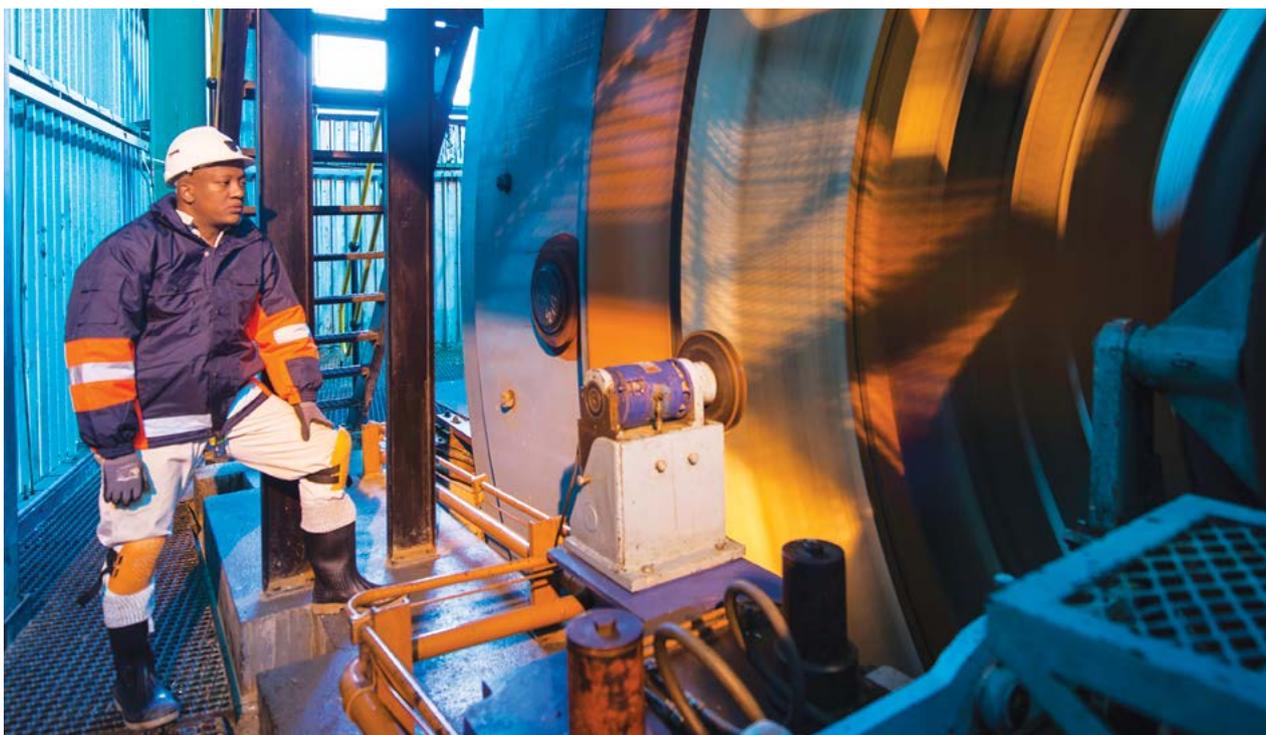
At the 2015 MINESAFE awards, Harmony's operations won five safety awards in the gold sector category:

- Bambanani mine – first place for best year on year improvement for the total injury frequency rate
- Target 1 mine – first place for 'best in class' for the total injury frequency rate
- Tshepong mine – third place for year on year improvement for the total injury frequency rate
- Joel mine – third place for 'best in class' for the total injury frequency rate
- Tshepong mine – fourth place for 'best in class' for the total injury frequency rate

The Kusasaletu proto captains received the MINESAFE proto award for rescuing 442 people from underground in the aftermath of the fire at the mine in February 2015.

Our Merriespruit 3 housing project was first runner up for the Govan Mbeki award in 2015. Our Masimong housing development was declared the winner both in the Govan Mbeki National Award for best housing development project in 2013 and in the Govan Mbeki National Award for the best community residential units project in 2014.

These awards all speak to our on-going commitment to building a sustainable business and we are proud to have been recognised.



Phakisa shaft

# HOW WE PERFORMED

## Relevant Global Reporting Initiative indicators: G4-EC1

		FY15	FY14	FY13	FY12
<b>Operating performance</b>					
Ore milled	000t	<b>18 063</b>	18 784	18 373	18 154
Gold produced <sup>1</sup>	kg	<b>33 513</b>	36 453	35 374	36 273
	000oz	<b>1 077</b>	1 172	1 137	1 166
Operating costs	R/kg	<b>369 203</b>	328 931	324 979	275 058
	US\$/oz	<b>1 003</b>	988	1 146	1 101
All-in sustaining costs	R/kg	<b>458 626</b>	413 433	431 745	357 390
	US\$/oz	<b>1 246</b>	1 242	1 522	1 431
Underground grade	g/t	<b>4.75</b>	4.77	4.54	4.26
<b>Financial performance</b>					
Revenue	R million	<b>15 435</b>	15 682	15 902	15 169
Production costs	R million	<b>12 632</b>	11 888	11 321	9 873
Production profit	R million	<b>2 803</b>	3 794	4 581	5 296
Operating margin	%	<b>18</b>	24	29	35
Net profit/(loss) for the year	R million	<b>(4 536)</b>	(1 270)	(2 349)	2 599
Total headline earnings/(loss) per share	SA cents	<b>(189)</b>	26	52	603
Capital expenditure	R million	<b>2 593</b>	2 528	3 649	3 049
Exploration spend <sup>13, 14</sup>	R million	<b>263</b>	458	673	500
Dividend spend	R million	<b>–</b>	–	435	431
Net debt	R million	<b>(2 332)</b>	(1 031)	(449)	(43)
<b>Market performance</b>					
Average gold price received <sup>1</sup>	R/kg	<b>449 570</b>	432 165	454 725	419 668
	US\$/oz	<b>1 222</b>	1 299	1 603	1 681
Total market capitalisation	R billion	<b>6.8</b>	13.6	15.6	33.0
	US\$ billion	<b>0.56</b>	1.3	1.6	4.0
Exchange rate	R/US\$	<b>11.45</b>	10.35	8.82	7.77
<b>Reserves</b>					
Gold and gold equivalents	Moz	<b>42.6</b>	49.5	51.5	52.9
Geographical distribution of gold reserves					
– South Africa	%	<b>52</b>	57	58	58
– Papua New Guinea	%	<b>48</b>	43	42	42
<b>Safety</b>					
FIFR – fatal injury frequency rate	per million hours worked	<b>0.11</b>	0.26	0.10	0.11
LTIFR – lost-time injury frequency rate	per million hours worked	<b>9.24<sup>8</sup></b>	7.54 <sup>7</sup>	5.46 <sup>7</sup>	6.86 <sup>7</sup>
TIA – total injury and accidents	number of incidents	<b>1 210<sup>8</sup></b>	953	912	1 167
<b>Health (South Africa)</b>					
– Shifts lost due to occupational illness and injury		<b>24 514</b>	25 338	20 236	23 497
– Noise-induced hearing loss (NIHL) compensated cases		<b>71</b>	57	52	101
– Silicosis cases certified <sup>4</sup>		<b>197<sup>8</sup></b>	175 <sup>7</sup>	185 <sup>7</sup>	872

		FY15	FY14	FY13	FY12
<b>People</b>					
Total number of employees and contractors <sup>2</sup>		31 114	34 746	36 579	36 915
South Africa: employees		26 000	28 991	30 867	31 566
South Africa: contractors		5 012	5 695	5 557	5 349
Papua New Guinea: employees <sup>2</sup>		75	59	101	102
Papua New Guinea: contractors <sup>2</sup>		27	1	54	106
Morobe Mining Joint Venture employees (100%)		1 390	1 534	1 628	1 798
Morobe Mining Joint Venture contractors (100%)		933	972	2 977	2 499
Employment equity (historically disadvantaged South Africans in management) <sup>6</sup>	%	58 <sup>8</sup>	46 <sup>7</sup>	46 <sup>7</sup>	44 <sup>7</sup>
Number of people in single rooms <sup>5</sup>		7 436 <sup>8</sup>	1 678 <sup>7</sup>	1 102 <sup>7</sup>	555 <sup>7</sup>
Number of people sharing		0 <sup>8</sup>	6 841 <sup>7</sup>	8 629 <sup>7</sup>	10 237 <sup>7</sup>
Number of people in critical-skill positions trained <sup>12</sup>		69 <sup>8</sup>	56 <sup>7</sup>	124 <sup>7</sup>	74 <sup>7</sup>
<b>Community – group local economic development<sup>11</sup></b>	R million	63.5 <sup>8</sup>	77.1 <sup>7</sup>	87.5	61.6
Meaningful economic participation <sup>9</sup>	%	28	28	28	28
Total discretionary spend	R million	5 565	5 595	5 956	5 329
Preferential procurement (BEE) spend	R million	3 849 <sup>8</sup>	3 442 <sup>7</sup>	2 459 <sup>7</sup>	2 138 <sup>7</sup>
Preferential procurement spend %	%	69	62	41	40
<b>Environment</b>					
Mineral waste (volume disposed)	000t	24 659 <sup>8</sup>	33 498 <sup>7</sup>	32 807 <sup>7</sup>	20 252 <sup>7</sup>
Total electricity use	000MWh	2 657 <sup>8</sup>	2 798 <sup>7</sup>	2 704 <sup>7</sup>	3 058 <sup>7</sup>
CO <sub>2</sub> emissions					
– Scope 1	000t CO <sub>2</sub> e	67 <sup>8</sup>	75 <sup>7</sup>	94	<sup>10</sup>
– Scope 2	000t CO <sub>2</sub> e	2 686 <sup>8</sup>	2 745 <sup>7</sup>	2 648	3 047
– Scope 3	000t CO <sub>2</sub> e	686 <sup>8</sup>	661 <sup>7</sup>	617	<sup>10</sup>
Water used for primary activities <sup>3</sup>	000m <sup>3</sup>	14 614 <sup>8</sup>	16 495 <sup>7</sup>	18 556 <sup>7</sup>	32 979 <sup>7</sup>
<b>Funding/guarantees for rehabilitation and closure</b>	R million	2 444	2 200	2 330	2 386

<sup>1</sup> Zero gold production capitalised in FY15, FY14 and FY13 (FY12: 36kg/1 157oz)

<sup>2</sup> Excluding employees from the Morobe Mining Joint Ventures

<sup>3</sup> Definition changed for FY13 to exclude fissure water from the reported figure

<sup>4</sup> The number of cases of pure silicosis confirmed by the South Africa's Medical Bureau of Occupational Diseases in FY13, FY14 and FY15. Previously we assured silicosis cases submitted to the Medical Bureau of Occupational Diseases

<sup>5</sup> The number of single rooms only represent hostels which are 100% converted. At the end of FY15, all employees living in hostels were living in single rooms. In FY14, the total number of single rooms (including single rooms in incomplete hostels) was 5 027 (FY13: 3 214) (FY12: 1 757)

<sup>6</sup> The increase in compliance indicators is due to alignment of Harmony's reporting with the Department of Labour's classification guidelines – (EEA9). For previous years, indicators were based on Patterson grade D-F only whereas C band employees are now classified as Junior Management and have been included in the 2015 employment equity percentage

<sup>7</sup> Assured by independent auditors in prior years – refer to [www.harmony.co.za/investors/reporting/annual-reports](http://www.harmony.co.za/investors/reporting/annual-reports)

<sup>8</sup> Assured by independent auditors in the current year. Please refer to the Assurance Report on page 204 and Glossary of Terms for definitions applied on page 222

<sup>9</sup> Percentage of production attributed to interests held by historically disadvantaged South Africans

<sup>10</sup> Not previously reported

<sup>11</sup> In addition, capital of R89 million was spent in FY15 on the upgrading of hostel accommodation at various operations (FY14: R106 million)

<sup>12</sup> We invested R1 million in FY15 (FY14: R1.2million) to train people in critical-skill positions

<sup>13</sup> As per income statement

<sup>14</sup> Total exploration spend including capitalised amounts are R385 million (FY15), R470 million (FY14), R1.2 billion (FY13) and R811 million (FY12)

# CHAIRMAN'S LETTER



**Patrice Motsepe**  
Chairman

**"...WE CAN MAKE A  
LASTING CONTRIBUTION  
TO THE ECONOMIC AND  
SOCIAL DEVELOPMENT  
OF ALL STAKEHOLDERS IN  
THE COUNTRIES WHERE  
WE OPERATE"**

## Dear Shareholder

During the past financial year the gold mining industry in South Africa and globally experienced a progressively weakening gold price and rising operating costs. Harmony responded to the lower gold price and higher costs, by restructuring and rationalising its asset portfolio, cutting costs, improving labour productivity, increasing the overall mining grade and focusing on mining only safe and profitable ounces.

Our company is well-positioned to benefit from higher gold prices and increased gold production. The gold mining industry, globally, responded to lower dollar gold prices in much the same way as it did in the preceding year. Shafts have been closed, capital spending has been deferred and management overhead costs have been reduced. While gold's average dollar price dropped by 6% to \$1 222/oz from the previous year's \$1 299/oz, the weakness of the rand against the dollar meant that in South African currency terms the average gold price received increased by 4% to R449 570/kg.

## SAFETY

The safety and health of everyone in Harmony is our primary concern. Our efforts to address and consistently improve our safety standards are on-going. The preparedness and quality of our safety measures was shown on 22 February 2015 when an underground fire broke out at Kusasalethu mine and all employees working underground at the time were brought to surface safely, with no-one suffering harm or injuries. The Minister of Mineral Resources at the time, Ngoako Ramatlhodi, and the Chamber of Mines both commended the rescue teams. Some of the rescuers who assisted us came from across the industry, displaying the spirit of comradeship that characterises the South African mining industry.

One of the most positive developments is that there were no fatalities at our South African operations during the second quarter. Our safety record for the year as a whole in terms of fatalities was the best that the South African operations have recorded in more than a decade. Regrettably nine of our colleagues lost their lives in accidents during the year. We remain committed to zero fatalities at all our operations. I send my personal condolences and those of the entire Harmony to the families, friends and work colleagues of the nine who so tragically lost their lives at our operations.

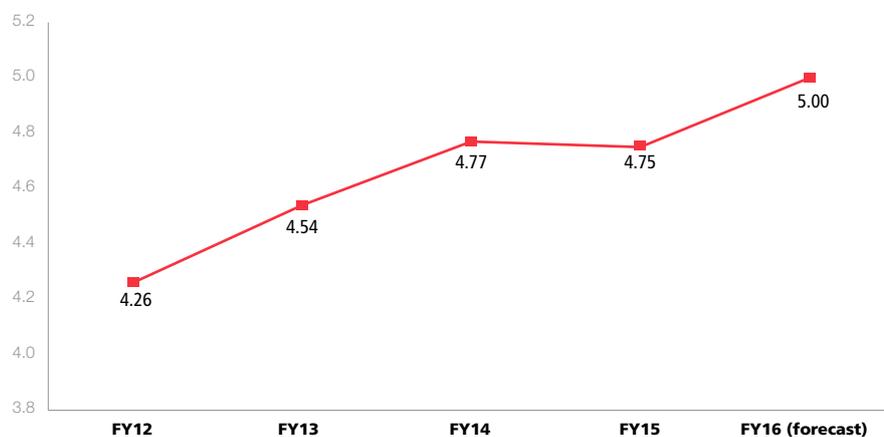
Our aim is to eliminate all work-related injuries and illnesses. All our operations are guided by our occupational health and safety policy, which is based on leading safety practices. This policy was formulated with the cooperation and active participation of management, unions and the Government.

In our drive to continually improve our safety performance, each operation is monitored monthly through a formal review system. Safety is a key performance indicator and a key component of performance reward for the vast majority of our people.

## OPERATIONAL PERFORMANCE

Harmony's strategy of developing and operating higher grade, profitable mines resulted in the average underground recovery grades increasing in the past couple of years and remaining steady in FY15. Planned recovered grade for FY16 is 5g/t – see the graph on page 11.

### Underground recovered grade (g/t)



Tightening margins, due to weak gold prices and rising costs have led to adjustments at our operations. To protect Harmony from the sliding gold price, we restructured some of our mines, right-sized employee numbers and mined only safe and profitable high-grade ounces. Target 3 was closed and Kusasaletu, Masimong, Doornkop and Hidden Valley were restructured. Our large capital investment in Kusasaletu has positioned us to mine the higher grade ore body and increase profitability.

The strategies and interventions by management to restructure and optimise our operations will position Harmony for a more profitable future. The benefits of this restructuring and optimisation will improve productivity, margins and profitability, even in these challenging times. In addition, cost management and cash generation will continue to be our primary focus in the year ahead.

Further details on the company's financial performance are provided in the Financial Director's Review on page 18 and on its operational performance in the section entitled Operational Performance on page 120.

### PAPUA NEW GUINEA

We continue to gain invaluable knowledge of Papua New Guinea's people, business, social structure and its exciting and valuable geology. Currently, Harmony's principal objective is to develop the Golpu copper-gold deposit into a producing mine. The results of the updated prefeasibility support our view that this deposit will create significant value for our shareholders and benefit all stakeholders.

Given the subdued market, the updated prefeasibility was based on a reduced capital requirement and lower operating costs. This resulted in an improved rate of return. The updated prefeasibility study covers the first stage (stage 1) of Golpu's development. Stage 1 of the Golpu development, targets the upper higher value portion of the ore body. Work will continue on optimising a second stage mine development (stage 2), which will encompass the rest of the ore reserves. The early stages of the Golpu project will be funded internally. Initial indications are that first production would be in 2020 with full production of 500 000 equivalent gold ounces expected from 2024 to 2029.

The two proposed block caves in stage 1 are designed to access approximately 30% of the tonnes which contain approximately 40% of the metal (gold and copper) of the Golpu reserve. The mining and processing infrastructure would then be utilised to exploit the remaining 70% of the tonnes which contain about 60% of the contained metal (gold and copper) of the Golpu reserve.

Harmony will fund the first three years from operating cash flows and from FY18 onwards, debt financing will also be considered. From FY21 stage 1 will be cash flow positive after capital expenditure. At financial year-end, the Golpu team was in the process of negotiating a pre-mine development agreement – a precursor to commencing with advanced exploration and feasibility support activities – with the Papua New Guinean government. Discussions post year-end have progressed well with a final draft of the proposed agreement circulated to the cabinet of Papua New Guinea for consideration.

# CHAIRMAN'S LETTER CONTINUED

During March 2015, we intersected a highly significant zone of copper-gold mineralisation at the Kili Teke exploration prospect which is located west of Golpu, in the Hela Province of the Papua New Guinean Highlands on one of our exclusively owned exploration licence areas. The Kili Teke exploration prospect has the potential to develop into a major copper-gold deposit similar to Golpu.

## SOUTH AFRICA

Since June 2015, Harmony and other major South African gold companies have been engaged in wage negotiations with the different worker representative organisations. During October 2015, Harmony concluded a three-year wage agreement with the National Union of Mineworkers, Solidarity and United Association of South Africa, which was extended to the entire workforce in the bargaining unit, as these unions represent the majority of our workforce.

The Tlhakanelo Employee Share Ownership Plan gives all the non-managerial employees of Harmony an opportunity to benefit as shareholders in Harmony's gains. The Tlhakanelo Share Ownership Plan has realised R44 million for the Harmony employees in the financial year under review.

At year-end, Harmony and its industry counterparts were awaiting confirmation from the Department of Mineral Resources that both it and they had achieved the end-2014 empowerment targets set by the Mining Charter.

The differences in interpretation relating to the "once empowered, always empowered" principle should be resolved in a manner that will ensure the long term global competitiveness and attractiveness of the South African mining industry.

Harmony continues to be committed to running its mines and operations for the benefit of its shareholders, workers, communities neighbouring its operations and all other stakeholders.

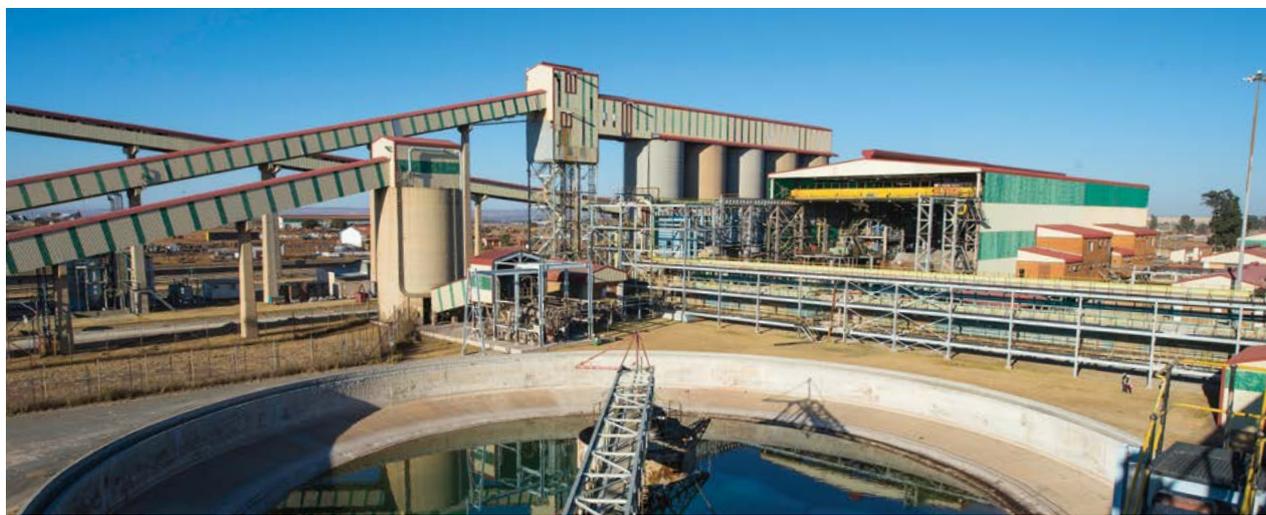
## PARTNERING WITH OUR STAKEHOLDERS

At Harmony we realise that, along with others in the mining sector, we can make a lasting contribution to the economic and social development of all stakeholders in the countries where we operate.

Our capacity to benefit all stakeholders is dependent and influenced by our long-term sustainability and profitability.

Our ability to develop and benefit all our stakeholders is influenced by and requires the cooperation and partnership of our employees, neighbouring communities and local and national Government.

One of our important objectives is to help our employees to acquire affordable housing in places where our people wish to live and where social and infrastructural facilities are readily available. Our programme of converting the former multi-occupancy hostels to provide private, married or single accommodation is largely complete and offers accommodation to those employees who choose to reside on mine properties. The workers who prefer to live elsewhere are paid a monthly living-out allowance that stood at R2 000 at the financial year-end.



Doornkop plant

We continue to work in partnership with the Department of Human Settlements to convert old hostels to family units. The Masimong 3 housing project has been completed while the conversion at Merriespruit is in progress. Additional housing and accommodation conversions are being investigated. Also noteworthy is that by December 2014, we had met our target in the hostels of one person per room.

Our approach to interacting with employees and Harmony's communities is based on direct, open and clear communication from which we can learn and understand their aspirations and needs. The full details are described elsewhere in this report, and we combine direct communication with indirect interaction through our employees' representative unions. This is particularly so on a day-to-day basis between mine managers and shaft stewards on issues that are specific to each mine.

### CARING FOR THE ENVIRONMENT

The protection and conservation of the environment is an integral part of Harmony's culture and way of doing business. We comply in all respects with our obligations to protect and rehabilitate our mining footprints both during and after the end of mining.

South Africa's National Development Plan supports the development of environmentally sustainable renewable energy initiatives that contribute to the creation of jobs. To this end, in FY14, Harmony commissioned its bio-energy project which is designed to reduce our carbon footprint, rehabilitate our land and create approximately 200 jobs for women and youth from our host communities at full production. Bio-fuel energy will be produced in the form of natural gas from bio-mass grown on our mine properties in the Free State. First gas from this project is scheduled to be produced in April 2016.

### THE GOLD MARKET

We at Harmony remain confident in gold's longer-term prospects. At the financial year-end, spot gold was trading in London at \$1 173/oz, almost 12% down on the \$1 327/oz at which it opened the year. It is more prudent to adopt a conservative approach and to expect a weaker gold price over the short to medium term period. While demand in the traditional market of India and China remains strong, speculative demand by investors in the mature Western economies remains vulnerable to when the United States Federal Reserve will raise interest rates.

In anticipation of higher interest rates in the United States, investors have been liquidating their positions in the gold exchange traded funds. Investment sentiment is also coloured by the fact that low inflation rates appear to be here to stay, at least for several years. This may tarnish gold's attraction as a safe-haven hedge.

In contrast, demand for gold to be held as a reserve by central banks has not waned. The central banks of China, Russia and others have been adding to their gold holdings for various reasons that often have more to do with domestic than with global economic issues. At the same time, official holdings by the world's mature economies have stopped declining.

As the dollar has strengthened against other currencies, helped in part by the prospect of higher interest rates in the United States, the metal's price in other currencies has actually increased. This is particularly so in South Africa where most of our operating costs are incurred in the local currency. This affords Harmony considerable flexibility in its operational planning and adds to our confidence in the metal which underpins our business.

### THANKS

It gives me great pleasure to acknowledge and to express my gratitude to the directors of Harmony, our management team, employees and all our other stakeholders who contribute to making Harmony the fine company that it is.

I would also like to express my personal gratitude to Graham Briggs who will be retiring as our CEO when a suitable successor is appointed. Graham did a good job as our CEO and will assist with the exciting work in Papua New Guinea.

Harmony is currently facing and dealing with several challenges but I remain confident about its profitability and competitiveness.

**Patrice Motsepe**  
Chairman

23 October 2015

# CHIEF EXECUTIVE OFFICER'S REVIEW

THE MAJOR ISSUES OF FY15 AND BEYOND



**Graham Briggs**  
Chief executive officer

Our strategy remains unchanged: a company that creates value by increasing its margins and generating the cash necessary to develop Golpu in Papua New Guinea – ensuring positive shareholder return in the long term. We have restructured underperforming operations, cut corporate costs, curtailed capital expenditure and reduced our employee numbers. We are now well-positioned to continue to produce safe, profitable ounces.

## SAFETY AND HEALTH

I am pleased to report a significant improvement in our safety performance with Harmony recording its first ever fatality-free quarter for the South African operations in the second quarter of FY15. Harmony's safety performance in terms of all parameters measured improved over the year. However, we are not content with our performance, as nine lives were tragically lost at our mines during the year under review.

The colleagues we mourn are Mhanjelwa Cebani, a rockdrill operator at Doornkop, Mosoeu Ntsutheleng, a team leader at Kusasaletu, and Mariselunes Thibello, a rock drill operator at Bambanani, who were involved in fatal falls of ground: Mmaneo Florisa Muso from Tshepong, Michael Chobeng from Masimong and Maxwell Wari from Hidden Valley who were involved in transport accidents; Bernardo Ernesto Cuambe, an engineering assistant at Unisel, who was involved in a headgear accident; and security officers, Sello Jacob Bobejaan and Thapelo Andries Mofokeng who succumbed to gas and smoke inhalation from a self-made heating device inside their security cubicle at the Brand 1 ventilation shaft. To their families, their friends and their colleagues, I send our most sincere condolences.

We continue to strengthen our resolve to make our mines accident free. Following each incident in which an injury – whether fatal or not – occurs, an incident report detailing “lessons learnt” is circulated to all operations to enable them to scrutinise their own systems and procedures. This enables them to pro-actively identify potential shortcomings and to take remedial action where necessary to prevent a recurrence of any such incident.

To achieve zero harm, visible felt leadership is enforced at all levels. This is based on our commitment to safety as a priority that is embedded in our organisational culture. Initiatives implemented at the operations encourage safer behaviour throughout the company. Emphasis on health and safety campaigns has been reinforced, via communication initiatives and regular visits underground by senior management. The focus of these visits was training and coaching.

In terms of the delivery of health services, Harmony has moved away from the historic mine-hospital approach that was curative in nature to one that is more pro-active and focused on prevention. This approach entails providing decentralised primary healthcare-based services, called health hubs, as close as possible to where people are – that is at the operations. This health hub concept has been rolled out to the entire group and has delivered significant benefits, including decreased absenteeism, hospitalisation and medical mortality.

At an industry level in South Africa, we participate in an industry working group to address issues relating to compensation and medical care for occupational lung disease. The gold mining companies involved in the working group have engaged with all stakeholders to co-operate in the design and implementation of a comprehensive

**“EACH OPERATION HAS  
BEEN POSITIONED TO BE  
PROFITABLE. OUR PLANS  
ARE REALISTIC AND CAN  
BE ACHIEVED”**

solution that is fair to past, present and future employees, and one that is also sustainable for the sector. Harmony has been working for many years to eliminate the incidence of occupational lung disease. Various measures have been implemented to improve the management of dust underground – and these efforts continue.

## **RESTRUCTURING FOR SUSTAINABILITY AND PROFITABILITY**

Among the challenges with which Harmony has had to contend has been that of sustaining operations – particularly those of mines that have fallen into losses, squeezed between accelerating costs and falling gold prices. Losses at two of our mines – Kusasalethu and Doornkop – have combined to pull Harmony's overall performance down.

Restructuring at Kusasalethu will contribute to restoring the mine's profits. We have closed the older, lower grade mine and are now mining in the higher grade, new areas. Doornkop, which operated at a loss in each of the past year's four quarters, presented and continues to present a significant challenge. Following several meetings with organised labour, Harmony and the unions have agreed to a new, revised operational plan for Doornkop that will return the mine to profitability, thus saving a significant number of jobs. The outcome of the Doornkop discussions is testimony to what can be achieved when all parties engage with the same aim in mind – to find a sustainable solution to ensure the mine's viability and at the same time securing the majority of jobs.

At Masimong, with its marginal grades, the mine has been restructured for profitability by reducing development rates and concentrating on higher-grade areas. This strategy will reduce the mine's remaining operational life expectancy to about two years and, while this is short, they are expected to be two profitable years.

At the Hidden Valley mine we have reduced the waste stripping to increase our profitability. Due to the lower metal prices we revised Hidden Valley's life of mine plan and focused on further cost savings. Post year-end, on 18 July 2015, a road accident occurred at Hidden Valley, fatally injuring one employee. The mine was closed for several weeks while intensive safety audits were conducted. This is likely to impact the production of the first quarter of FY16.

## **STAKEHOLDER RELATIONS**

Stakeholder engagement is vital – in both South Africa and Papua New Guinea. In South Africa, several meetings were held during the year with various government officials to address issues of mutual interest, to influence legislation and to guide policy development. This included on-going meetings with the former Minister of Mineral Resources, Advocate Ngoako Ramatlhodi, to discuss gold industry and company issues.

We continue to participate in stakeholder and community forums that seek to address the challenges that the gold industry faces – whether with community members, our own employees, government or the Chamber of Mines.

In Papua New Guinea, our teams continue to engage with landowners in a constructive and professional manner. Government acknowledges the significant contribution from mining companies in the country and I find it encouraging that they are always willing to meet with management.

## **SOUTH AFRICA'S GOLD INDUSTRY**

The South African gold sector – although viewed by critics as having reached a mature stage – continues to deliver a large fraction of the country's export earnings and employment opportunities.

Harmony brings a number of skills to the mining of narrow, deep-level and low-grade reefs, which will serve the industry well for some decades to come. That being said, the industry's future success and sustainability will depend on a great degree of cooperation and dedication across each mine as well as on government creating an economic environment that is conducive to profitable mining.

## **POWER IN SOUTH AFRICA**

The electricity grid in South Africa has been under pressure since November 2014 and the national power supplier, Eskom, has announced that load shedding will continue in the medium term. Our primary concern is that load shedding can impact production and the safety of workers underground during a power outage. Various initiatives have been implemented to ensure that our employees remain safe, that production continues and that energy is managed efficiently. These initiatives range from optimising and managing our electricity consumption, especially during peak times, the installation of modern efficient equipment, the potential inclusion of renewable energy as a power source and co-generation as well as own generation. For more on this, see the Environmental Performance section on page 100.

# CHIEF EXECUTIVE OFFICER'S REVIEW CONTINUED

## **SOUTH AFRICA'S CHANGING LABOUR ENVIRONMENT**

At Harmony, we live our five values – safety, accountability, achievement, being connected and honesty. Our pro-active communication campaign focuses on keeping our employees informed about the state of the mine they work at as well as about the health of Harmony. We engage with all unions – whether formally recognised or not – and considerable emphasis has been given to direct engagement with employees and unions over the past two years. A particular emphasis during the year was on fostering an understanding of the economic circumstances of the sector as a whole and of Harmony's mines specifically.

During FY15, operational restructuring involving a reduction in employee numbers was undertaken at Masimong, Doornkop and Kusasalethu in South Africa. The Ernest Oppenheimer hospital and Target 3 mine in the Free State were closed. Mitigating alternatives to retrenchment were implemented, including transfers to other operations, voluntary separation, early retirement and re-skilling. Year-on-year, the total number of employees (including contractors) in South African fell by 11% to 31 012 in FY15.

South Africa's gold mining sector entered into biennial wage talks in June 2015. The manner in which negotiations had previously been managed was something of the past, as mining companies sought to move away from the previous positional approach to negotiations – with both sides setting out initial demands and offers and then moving towards a happy medium. Harmony and the other participating gold-mining companies sought rather to explain the industry's current difficulties and challenges so that talks could start with both sides knowing each other's position.

High wage increases and industrial action will result in the downscaling of operations and the closure of vulnerable mines. Job losses would be inevitable. As much as we at Harmony wish to sustain employee numbers, it is simply not possible if the very sustainability of our company is to be undermined. Mines and shafts will close as their resources are exhausted or become unviable, and that will mean fewer job opportunities. This is a situation that is faced not only by Harmony, but by the rest of South Africa's gold mining sector. Slowing, halting or lessening the process of job losses can only be achieved through honest co-operation between employers and employees.

We have reached a three-year wage agreement with the National Union of Mineworkers, United Association of South Africa and Solidarity, effective from 1 July 2015. Increases range from 6% for miners, artisans and officials to 10.4% for category 4 employees. Although it has been a protracted negotiation process, I believe that we have achieved what we set out to do – reaching an agreement which ensures that we remain sustainable as a company and as an industry, and at the same time limiting job losses.

## **MINING CHARTER AND SOCIAL RESPONSIBILITY**

As calendar year 2014 came to an end, we were confident that we had achieved all of the empowerment targets. We believe that our performance in terms of each of the nine pillars of the Mining Charter illustrates that we have done more than just comply.

The former Minister of Mineral Resources, Advocate Ngoako Ramatlhodi, announced the department's assessment of the mining industry's compliance with the Mining Charter during May 2015. Harmony acknowledges the Department of Mineral Resources' account of the mining industry's successes in achieving these targets and that it recognised the role of the mining industry as a driver of growth and development in South Africa.

The Department of Mineral Resources disagreed with the mining industry's overall claims of compliance, particularly that of "once empowered, always empowered". It was then agreed that the mining companies and the department should together approach the court for clarification. The Chamber of Mines – on behalf of the mining industry – filed its application with the High Court on 4 June 2015.

Harmony will continue its journey to bolster its future in South Africa by proactively participating in transforming the South African mining industry. We are committed to identifying opportunities to facilitate ownership by historically disadvantaged South Africans, to transforming our workforce, to investing in developing South Africans and to creating opportunities for small business entrepreneurs. Our achievements in respect of the Mining Charter are reported more fully elsewhere in this Integrated Annual Report 2015.

## **PAPUA NEW GUINEA**

Turning the Golpu deposit in Papua New Guinea into a producing mine with our joint venture partner is Harmony's principal growth project. Completion of the updated prefeasibility study in December 2014 was a major project milestone. The study was based on a vertically dipping ore body containing a resource of 20.2Moz of gold and 9.4Mt of copper. While a feasibility study has still to be completed, indications are that this world-class deposit could be worked from two block caves with first production in 2020 and

full production of 6Mt attained in 2024. Attributable annual production for Harmony will be significant and is estimated to average 500 000 gold equivalent ounces annually from 2024 to 2029. On this basis, the mine would have an initial estimated life of some 27 years, though the deposit remains open ended and may offer further scope for development.

Results of the updated prefeasibility study support our view that Golpu is a spectacular ore body with a large copper component. It is affordable and mineable. Key objectives of the study were to reduce the capital required for the project, lower operating costs and improve the rate of return.

The initial stages of the project will be funded from internal cash flows. Other funding options will be considered for later stages of the project. Given the current volatility in the gold price, we are focused – more than ever – on cost control and cash generation at existing operations to fund Golpu.

Elsewhere in Papua New Guinea, Harmony's exploration targets are centred on highly prospective areas where field work and surface sampling have delivered sound indications of copper and gold.

## REPLACING OUNCES

As our current resources are finite, it is vital to have a project pipeline to replace reserves mined. During March 2015, a highly significant zone of copper-gold mineralisation was intersected at the Kili Teke exploration prospect, on one of our exclusively owned exploration licence areas in Papua New Guinea.

Initial diamond drill testing of the Kili Teke prospect is currently underway. Assays received from the first four holes have all returned broad porphyry-style copper-gold intercepts with mineralisation extending to surface. The mineralisation contains higher grade intervals of copper-gold mineralisation up to 202m @ 0.74% copper and 0.57g/t gold. At this stage, the mineralisation remains open through the drill pattern over 500m, and at depth.

In an environment where very little is being spent on exploration and with the paucity of new major copper and gold discoveries, the results from this grassroots prospect are very encouraging. As the extent of the surface copper-gold geochemical footprint is yet to be tested, there is potential to develop this find into a major copper-gold deposit similar to Golpu, Ok Tedi or Frieda River which have resource cut-off grades of around 0.2% copper. New discoveries are one of the best avenues to create shareholder value.

## OUTLOOK FOR FY16

Our operational aims in FY16 will be to contain costs and remain South Africa's lowest-cost producer when measured in rands per tonne mined and ensure that every operation is profitable.

In contrast to South Africa where our mines are all mature operations, we are in the process of developing a greenfields project in Papua New Guinea. The feasibility study on stage 1 and the prefeasibility on stage 2 are due to be completed in December 2015. This, together with the completion of a pre-development agreement with the Papua New Guinean government, will add more certainty to the development of a mine at Golpu. Our exploration programme has enjoyed, and continues to enjoy, considerable success in locating copper-gold mineralisation and we shall continue this activity methodically.

I continue to believe in the future of Harmony. Each operation has been positioned to be profitable. Our plans are realistic and can be achieved.

## RECOGNITION

During July 2015, I indicated to the board that I wish to retire from my role as chief executive officer and director of the board. Thank you to everyone who has contributed to making Harmony what it is. I am grateful for the support and guidance of our chairman, Patrice Motsepe, of my board colleagues and management team, and of the many people who work on our mines and in our exploration teams.

**Graham Briggs**  
**Chief Executive Officer**  
 23 October 2015

# FINANCIAL DIRECTOR'S REVIEW



**Frank Abbott** Financial director

## PERFORMANCE OVERVIEW FOR FY15

During the financial year under review, Harmony restructured its high-cost operations to optimise profitability. In particular:

- Target 3 was placed on care and maintenance at the end of the first quarter of FY15
- We embarked on a life-of-mine optimisation process at the South African operations to ensure a greater focus on profitability and the mining of higher grade areas. This process resulted in the restructuring of Kusasaletu, where the old mine levels were closed and a Section 189A process was completed in the third quarter of FY15
- Doornkop's life-of-mine plan was shortened and focused on higher grade areas
- Restructuring at Hidden Valley resulted in a revised mine plan to reduce costs that placed greater emphasis on operational improvements
- Masimong restructuring involved reducing development rates and a greater focus on mining higher-grade areas

The 8% decrease in production recorded for the year was mainly due to stoppages at Kusasaletu, the suspension of mining at Target 3 when it was placed on care and maintenance at the end of September 2014, and a decrease in production at Hidden Valley. The average underground grade remained stable in FY15. The Harmony group's revised business plans for FY16 resulted in an impairment of R2.1 billion (US\$174 million) for the Hidden Valley operation following the reduction in the life of mine. Other impairments include R1.0 billion (US\$85 million) following the restructuring and downsizing at Doornkop that was aimed at establishing a smaller but more profitable mine.

Harmony maintained a solid balance sheet. The strong cash flows generated from operations enabled Harmony to fund the majority of its own capital expenditure despite operational and market challenges experienced during the year.

## KEY DRIVERS OF FINANCIAL PERFORMANCE IN FY15

	FY15	FY14	Change %
Gold produced (kg)	33 513	36 453	(8)
Gold produced (oz)	1 077 466	1 171 987	(8)
Underground recovered grade	4.75	4.77	–
Gold sold (kg)	34 332	36 288	(5)
Gold sold (oz)	1 103 793	1 166 682	(5)
Gold price received (R/kg)	449 570	432 165	4
• Gold price received (\$/oz)	1 222	1 299	(6)
• Exchange rate (R/US\$)	11.45	10.35	11
Cash operating costs and capital (R/kg)	442 895	397 964	(11)
Cash operating costs and capital (US\$/oz)	1 203	1 196	(1)
All-in sustaining costs (R/kg)	458 626	413 433	(11)
All-in sustaining costs (US\$/oz)	1 246	1 242	–

The **average gold price received** in rand terms increased by 4% as the weakening of the rand against the US\$ offset the continued decrease in the US\$ gold price.

**All-in sustaining costs (R/kg)** increased by 11% to R458 626/kg (0% to US\$1 246/oz). The increase is mainly attributable to the decrease in gold sales and the increase in production costs.

## EXTRACT FROM THE INCOME STATEMENT

	FY15	FY14	Change %
Revenue	15 435	15 682	(2)
Production costs	12 632	11 888	6
Impairment of assets	3 471	1 439	>(100)
Employment termination and restructuring costs	251	274	8
Gross loss	3 618	406	>(100)
Exploration expenditure	263	458	43
Loss on scrapping of property, plant and equipment	491	–	(100)
Other expenses (net)	378	208	(82)
Taxation credit	704	279	>100
Net loss for the year	4 536	1 270	>(100)

**Revenue** for FY15 of R15 435 million is 2% lower (or US\$1 348 million, 11% lower) than FY14 mainly as a result of the 5% decrease in the volume of gold sold, which was offset partially by a 4% increase in the average rand gold price received.

**Production costs** were well controlled and only increased by 6% to R12 632 million (reduced by 4% to US\$1 103 million), despite higher-than-inflation price increases in electricity, labour costs and the cost of consumables.

A total **impairment** of R3.5 billion (US\$285 million) was recognised, which consisted of R2.1 billion (US\$174 million) for Hidden Valley, R1.0 billion (US\$85 million) for Doornkop, R278 million (US\$23 million) for Phakisa and R43 million (US\$3million) for Freddie's 9. The impairment of Hidden Valley was recorded following the reduction in its life of mine as the lower gold price and increasing costs continue to adversely impact its profitability.

**Employment termination and restructuring costs** of R251 million (US\$22 million) in FY15 are a result of the restructuring of under-performing operations.

**Exploration expenditure** of R263 million (US\$23 million) for FY15 relates mainly to the various projects in Papua New Guinea, of which most was spent on Golpu. The amount of spend reflected in the income statement decreased from the prior year as the Golpu project's stage 1 exploration expenditure was capitalised following the approval of the project's updated prefeasibility study by the Harmony and Newcrest boards in December 2014.

**Loss on scrapping of property, plant and equipment** of R491 million (US\$42 million), recorded mainly for Kusasalethu and Masimong, relates to the abandonment of unprofitable mining areas arising from the life-of-mine optimisation process, which placed greater emphasis on mining of profitable and higher grade areas.

**Other expenses** includes R382 million (US\$33 million) (2014: R155 million (US\$15 million)) for the foreign exchange translation loss on the US\$-denominated loan facilities.

The **taxation credit** in FY15 resulted from the reduction in the average deferred tax rates at the South African operations following completion of the annual life-of-mine plans.

The **net loss** for the year was mainly due to the impairments of Hidden Valley and Doornkop, the loss on the scrapping of property, plant and equipment following the life-of-mine optimisation process and reduced production.

# FINANCIAL DIRECTOR'S REVIEW CONTINUED

## NET DEBT

	FY15	FY14
<b>Borrowings</b>		
Long-term	(3 399)	(2 860)
Short-term	–	–
Total borrowings	(3 399)	(2 860)
Cash and cash equivalents	1 067	1 829
<b>Net debt</b>	<b>(2 332)</b>	<b>(1 031)</b>

In FY15, the syndicated US\$300 million loan facility was settled and Harmony entered into a new US\$250 million revolving credit facility. Translation losses of R382 million (US\$33 million) were recorded on the loans owing to the weakening of the rand against the dollar. The facility matures in February 2018.

A total of R400 million (US\$35 million) was drawn down on the R1.3 billion Nedbank revolving credit facility during the year. The facility matures in December 2016.

Cash and cash equivalents declined to R1 067 million (US\$88 million) from R1 829 million (US\$172 million).

## EXTRACT FROM THE CASH FLOW STATEMENT

	FY15	FY14
Cash generated by operating activities	2 006	2 268
Cash utilised by investing activities	(2 908)	(2 640)
Cash generated by financing activities	148	144
Net decrease in cash and cash equivalents	(762)	(260)

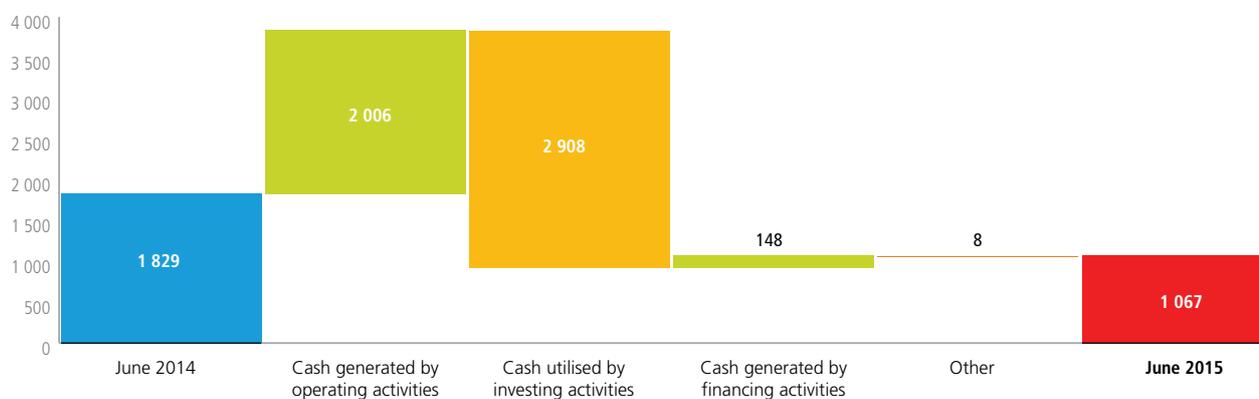
**Cash generated by operating activities** decreased by 12% to R2 billion (or 20% to US\$176 million) mainly due to the decrease in revenue and increased production costs (as noted).

**Cash utilised by investing activities:** Capital expenditure increased by 7% to R2 822 million (or 4% to US\$246 million) in FY15 from R2 648 million (US\$256 million) in FY14. Harmony's focus is on capital expenditure that supports safe production and a sustainable future.

**Cash generated by financing activities:** During the year, there was a net cash outflow of US\$20 million (R204 million) on the US\$ loan facilities and we raised borrowings of R400 million (US\$35 million) on the Nedbank ZAR facility.

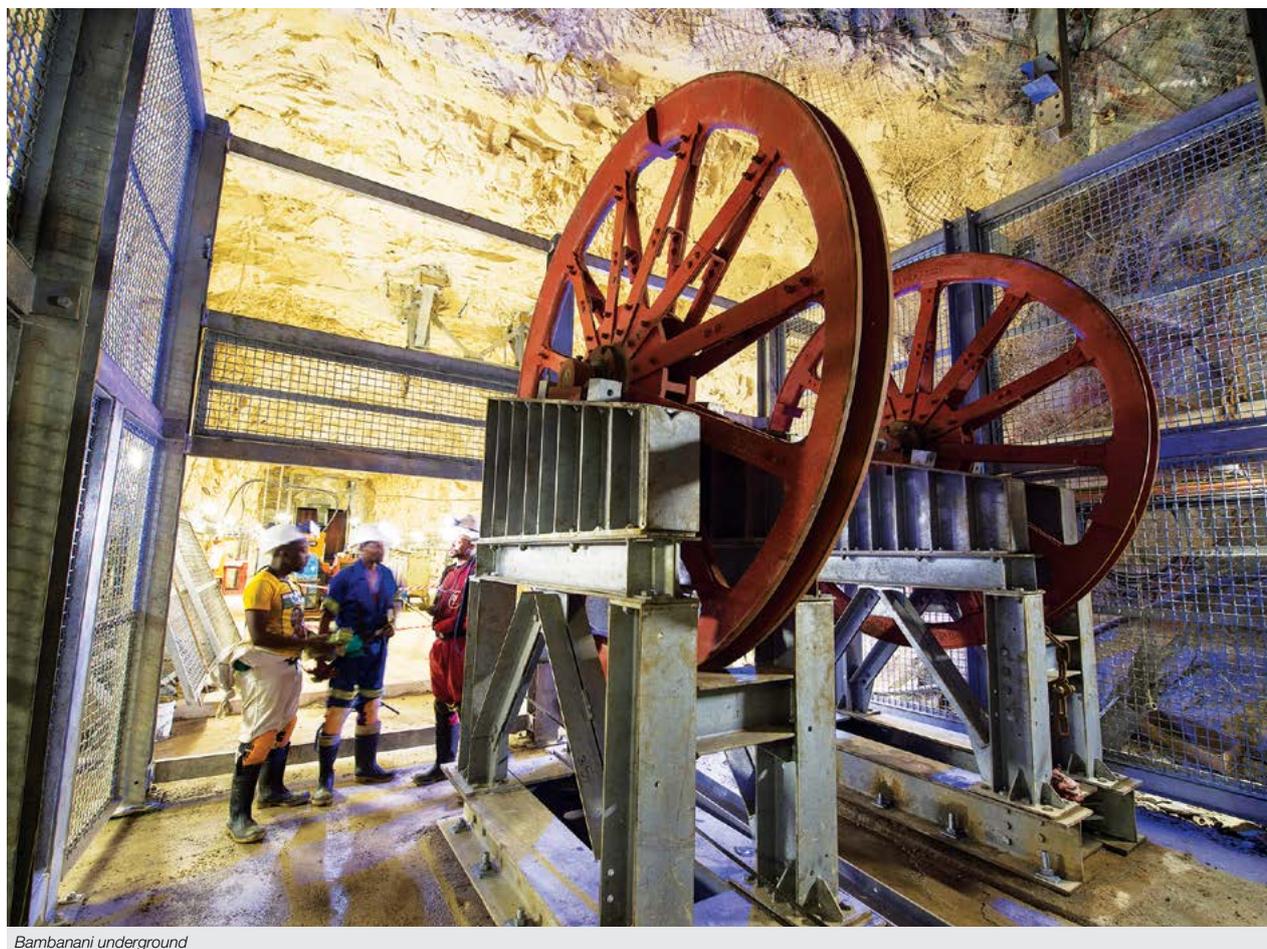
For more on this, refer to the consolidated financial statements in the Financial report 2015. Which is available at [www.har.co.za/15/download/HAR-FR15.pdf](http://www.har.co.za/15/download/HAR-FR15.pdf).

**Change in cash FY15 (Rm)**



**OUTLOOK**

We believe that in restructuring and optimising our operations to focus on the mining of higher grade ore to grow gold production, we will increase margins and generate free cash flow.



Bambanani underground

# SOCIAL AND ETHICS COMMITTEE CHAIRMAN'S REPORT

## APPROACH TO SUSTAINABILITY



**Modise Motloba**

Independent non-executive  
deputy chairman

Chairman, social and ethics committee

As the chairman of the social and ethics committee, I am again honoured to report on the matters within this committee's mandate for the year ended 30 June 2015, in accordance with the Companies Act 71 of 2008 (the Act). This committee is established in terms of section 72 and regulation 43 of the Act and complies with its requirements and those regulations pertaining to the composition and functions of a social and ethics committee. As a statutory requirement, our social and ethics committee is established by the board and fulfils its functions on behalf of Harmony and its subsidiary companies. For more information on the composition of this committee, refer to the Corporate Governance section on page 172.

The committee is cognisant of its duties and is committed to aligning Harmony with the socio-economic transformational agendas of our host countries. We aim to leave lasting legacies for our employees, for our operations' host communities and for the countries in which we operate.

### PURPOSE AND ROLE

As a committee, we assist the board in ensuring that Harmony remains a committed and responsible corporate citizen. This is done by overseeing and monitoring the company's policies and activities on public safety, health, social investment, economic investment, labour relations, ethics, government relations and environmental management. The terms of reference of this committee are available at [www.harmony.co.za/sustainability/governance#policies](http://www.harmony.co.za/sustainability/governance#policies).

The social and ethics committee is confident that during the past financial year it complied with the legal, regulatory and other responsibilities assigned to it by the board.

### APPROACH TO SUSTAINABILITY

Sustainable development is woven into the way we do business. It is at the core of Harmony's strategy and value proposition.

At Harmony, we work to ensure that we leave lasting legacies, tangible impacts that extend beyond the lives of our mines and that they are aligned with the legitimate expectations of our stakeholders. We continue to interact with our various stakeholders and aim to satisfy their needs to the best of our ability. The process of communicating and engaging with our stakeholders helps to develop and sustain mutually beneficial relationships.

In terms of our stakeholder engagement policy, the subject of our engagement is determined by those matters that are of material significance to our stakeholders, and is based on a thorough understanding of their views, needs, perceptions and expectations. Our five core values underpin all stakeholder engagement. The social and ethics committee has reviewed the stakeholder engagement policy to ensure that it remains up to date and relevant in the current climate in which our company is operating.

We appreciate that our business is long-term and that our presence within, and our commitment to, our host communities will span the next few decades. We also recognise, that social, economic, political and environmental risks are becoming increasingly challenging and significant, and that Harmony must succeed in creating value for all its stakeholders.

## ACTIONS IN FY15

The committee, which undertakes its duties with accountability both to the board and to the company's stakeholders, met five times during the past financial year and attended one site visit during the year. The committee's key activities are summarised in the corporate governance report on page 172.

## PUBLIC SAFETY

The board reviewed the committee's responsibility in terms of the Act with regard to the monitoring of public safety and in future, the committee will receive and review quarterly reports on public safety from management. The committee is, however, satisfied that during FY15, the technical committee (as duly mandated by the board), sufficiently monitored and interrogated the company's continued efforts to improve employee safety – Harmony's top priority. The technical committee ensured we were fully informed regarding policy interventions underpinning our safety strategy and we are comfortable that this robust strategy will continue to deliver the expected improvements in safety across the group. For a detailed discussion on safety, please refer to pages 58 to 64 of this report.

## MINING CHARTER TARGETS

The Mining Charter was developed to assist in transforming the South African mining industry with 2014 set as the deadline for final compliance.

Harmony submitted reports per mining licence to the Department of Mineral Resources on its progress made in achieving targets specified by the Mining Charter. The reports focused on eight pillars, namely reporting, ownership, housing and living conditions, procurement and enterprise development, employment equity, human resources development, mine community development, sustainable development and growth.

Harmony's reports to the Department of Mineral Resources underscored our commitment to transformation and demonstrated good performance against all of the key parameters measured. Our key challenges in FY15 were that we were unable to comply fully with the targets for housing and living conditions and for procurement spend on services for the Doornkop mining licence. For more information refer to page 98 of this report.

When it comes to transforming our workforce, we have met all the group-wide targets, with the appropriate number of historically disadvantaged South Africans employed at all levels of management as well as of women in mining. We are currently undertaking additional work to ensure that we are fully transformed at an operational level too. For more on this see page 85.

To formalise our commitment to the Mining Charter, we have produced and adhered to social and labour plans for each of our operations. In the financial year under review, we continued to deliver projects in line with both our commitments and with the expectations of the regulators and our host communities. For more on our social and labour plan projects see page 87.

Although amendments to the Mineral and Petroleum Resources Development Act had been approved by parliament, the proposed bill was returned to the National Assembly for further review by the President in February this year, on the advice of the then Minister of Mineral Reserves. The outcome of the related review of the Mining Charter has also been postponed. While we await further announcements, Harmony continues to negotiate with government through the Chamber of Mines, which is representing the gold mining sector.

## BUILDING RELATIONSHIPS WITH OUR EMPLOYEES

We endeavour to have sound, lasting relationships with our employees, who make up the Harmony family. The safety and well-being of our employees remains paramount with safety interventions and proactive healthcare being our main focus. Harmony finds that engaged employees who share a common vision for the company and for the country are more successful in delivering the objectives of the company. Therefore communications at all tiers in the organisation were enhanced to sustain dialogue within the company to ensure that our operations were peaceful during the past year. We recognise that employee engagement is a material issue and remain vigilant and proactive in this regard. For more on our employee relations see page 79.

On 2 October 2015, Harmony signed a three-year wage agreement with all unions except with the Association of Mineworkers and Construction Union. As the agreement was reached with unions representing the majority of employees at Harmony, the agreement was extended to all employees.

# SOCIAL AND ETHICS COMMITTEE

## CHAIRMAN'S REPORT CONTINUED

Our commitment to engage honestly and appropriately extends to all relevant stakeholders. For more on our stakeholder engagement see page 52.

### ENVIRONMENTAL MANAGEMENT

Environmental management, particularly relating to our rehabilitation plans, remains central to sustainability. Our resources, much like the lifespan of our business, are not infinite.

This year saw the continuation of the rehabilitation programme which further reduces our total mining footprint, progression of the bio-energy project, development of solar parks and the establishment of a partnership for agriculture in respect of food security. All these projects are designed to deliver ecological benefits while supporting the socio-economic imperatives of job creation and entrepreneurial development.

### ASSURANCE AND REPORTING

Each year we review issues across the group to establish how relevant they are to the reporting period. This assists in identifying our material issues and our sustainability-related key performance indicators which, in turn, affect our level of assurance. The current review again indicated that our assurance levels are more than adequate but, in an effort to improve them steadily, we have decided to move local economic development and employment equity from a limited level of assurance to a reasonable level of assurance. In addition, the total number of incidents and accidents was added to the list of key performance indicators to be assured on a limited basis.

Papua New Guinea is included in the annual sustainability assurance scope, except where it is explicitly excluded. For FY15, Papua New Guinea was excluded for assurance of the housing and living conditions, procurement spend, number of certified silicosis cases, number of people trained for critical positions and employment equity key performance indicators.

This year we continued with the voluntary disclosure guidelines of the Global Reporting Initiative as we believe, particularly in areas relating to sustainability, this continues to add value to our reporting. Consequently, our online integrated report is produced in line with G4 recommendations.

I confirm that Harmony did not incur any material fines, convictions or penalties in any of the areas that fall within the mandate of the committee. There was also no material non-compliance with any legislation, regulations or codes within these areas during FY15.

### ETHICS

We believe ethical conduct is a prerequisite for doing business. There is a direct correlation between sustainable business success and consistent ethical behaviour. The continued success of our company depends on the highest levels of integrity across all aspects of our business. We want all our stakeholders to view Harmony as a company they can trust – therefore we are unequivocal about our values and the way in which these values find expression in our daily behaviour. Following the latest financial year-end, our code of ethics and code of conduct were developed further and updated during August 2015 to renew our commitment and responses to the challenge of unethical conduct in business. For more on these codes refer to page 180 of this report.

### THANKS

We continue to make considerable progress on our journey toward sustainable development with tangible benefits for all stakeholders. The commitment of our people to safety, health, governance and environmental issues is commendable and for that I thank you. My sincere appreciation goes to members of the social and ethics committee and the board for their continued and invaluable guidance, support and input.

**Modise Motloba**

**Chairman: social and ethics committee**

23 October 2015

# OUR STRATEGY AND INVESTMENT CASE

Our strategy remains unchanged: to create value by increasing margins and generating the cash necessary to develop Golpu in Papua New Guinea. We revisit our strategy throughout the year to ensure that it remains relevant and appropriate, while being responsive and adaptive to both internal and external changes. We responded to changes in our economic environment and as a result restructured under-performing operations, cut corporate costs and curtailed our capital expenditure. These actions position our operations well to produce safe, profitable ounces in future.

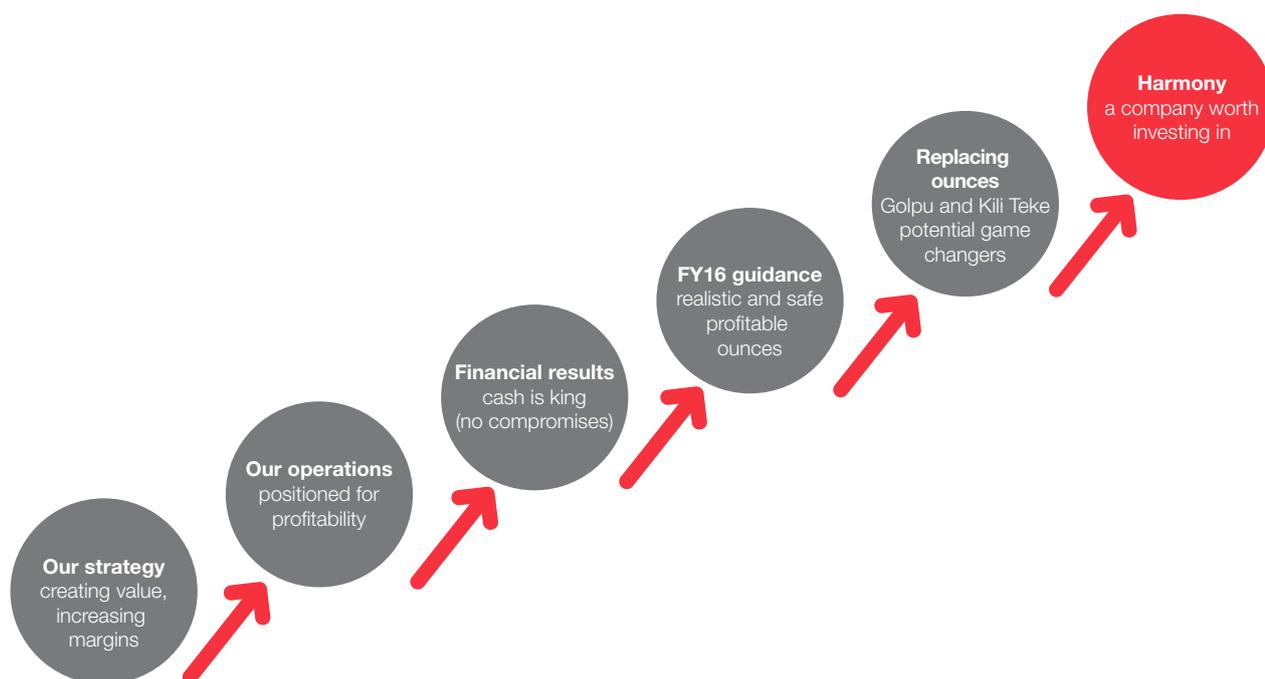
To ensure that the value of all our assets are accounted for in our share price and to create a viable investment case, we are assessing ways of funding Golpu and unlocking the true value of each of our assets. This will ensure positive shareholder returns in the long term.

Our strategy underpins our actions, allowing everyday decisions to move the company towards our goals. One of the ways in which we achieve our strategy is through having the right people in the right jobs, who understand our objectives and strive to achieve our strategy. We do this by highlighting our strategy in all training and communication between management and employees (refer to the section on Employees and Communities on page 78 for information on our employees).

Although we are not highly geared, we aspire to be debt free in the future. We have provided realistic operational guidance for FY16 (refer page 123 of the Operational Performance section) which forms the basis of what we set out to achieve in the year to come.

Harmony's investors have exposure to South Africa, Papua New Guinea, gold and copper. We released the updated prefeasibility study of our copper-gold project, the high grade Golpu deposit, in December 2014 (refer [www.harmony.co.za/our-business/exploration/golpu-updated-prefeasibility-results](http://www.harmony.co.za/our-business/exploration/golpu-updated-prefeasibility-results) or to page 154 of the Projects and Exploration section of this report). The feasibility study of the Golpu project has commenced and will be completed by the end of calendar year 2015, while the information is scheduled to be released to the market early in 2016.

During FY15, our greenfield exploration also yielded encouraging results from the Kili Teke prospect in Papua New Guinea which we will continue to pursue in FY16. For the latest exploration results, please refer to [www.harmony.co.za/investors/news-and-events/company-announcements-2/announcements-2015/866-superb-exploration-results-from-harmony-s-kili-teke-prospect](http://www.harmony.co.za/investors/news-and-events/company-announcements-2/announcements-2015/866-superb-exploration-results-from-harmony-s-kili-teke-prospect) or refer to page 153 of the Projects and Exploration section of this report. We believe that the company has been positioned to benefit from higher gold prices. Unlocking the value in each of our assets – which is key to our strategy – involves positioning each operation to be profitable by driving production and limiting costs so as to create free cash flow. Our plans are realistic and achievable. We are one of the few companies that continues to spend on exploration and to find excellent deposits. Our company has an exciting future and is worth investing in.



# HOW WE CREATE VALUE

OUR BUSINESS MODEL AND VALUE CHAIN  
for the financial year ended 30 June 2015

## HARMONY'S PROCESS



**LOCATE AND IDENTIFY  
EXPLORATION TARGETS**  
Obtain geological information



**VALUATION STUDIES**  
Feasibility studies to determine economic viability of ore bodies



**ESTABLISH INFRASTRUCTURE  
AND BUILD MINES**  
Obtain financing and create infrastructure to access mineral resources

## WE INVESTED



**1.08Moz**  
**RESERVES CONVERTED TO  
PRODUCTION**



**31 114**  
**PEOPLE**



**2 657GWh**  
**POWER**



**R2 963m**  
**CAPITAL EXPENDITURE  
AND EXPLORATION**



**R12 632m**  
**PRODUCTION COSTS**

## VALUE CREATED

**R15 435m**  
**REVENUE**

**R2 803m**  
**PRODUCTION PROFIT**

**1.08Moz**  
**GOLD PRODUCED**

**909 596oz**  
**SILVER PRODUCED**

Harmony creates value through more channels than just monetary spend. We continue to help improve education, build infrastructure, provide healthcare, stimulate local economies and rehabilitate the environment. Examples of this work can be found throughout this report.

Everything we do at Harmony is underpinned by our values:





**MINING OPERATIONS**  
Extraction of mineral reserves



**MARKETING AND BENEFICIATION**  
Extracting the gold from the ore and refining

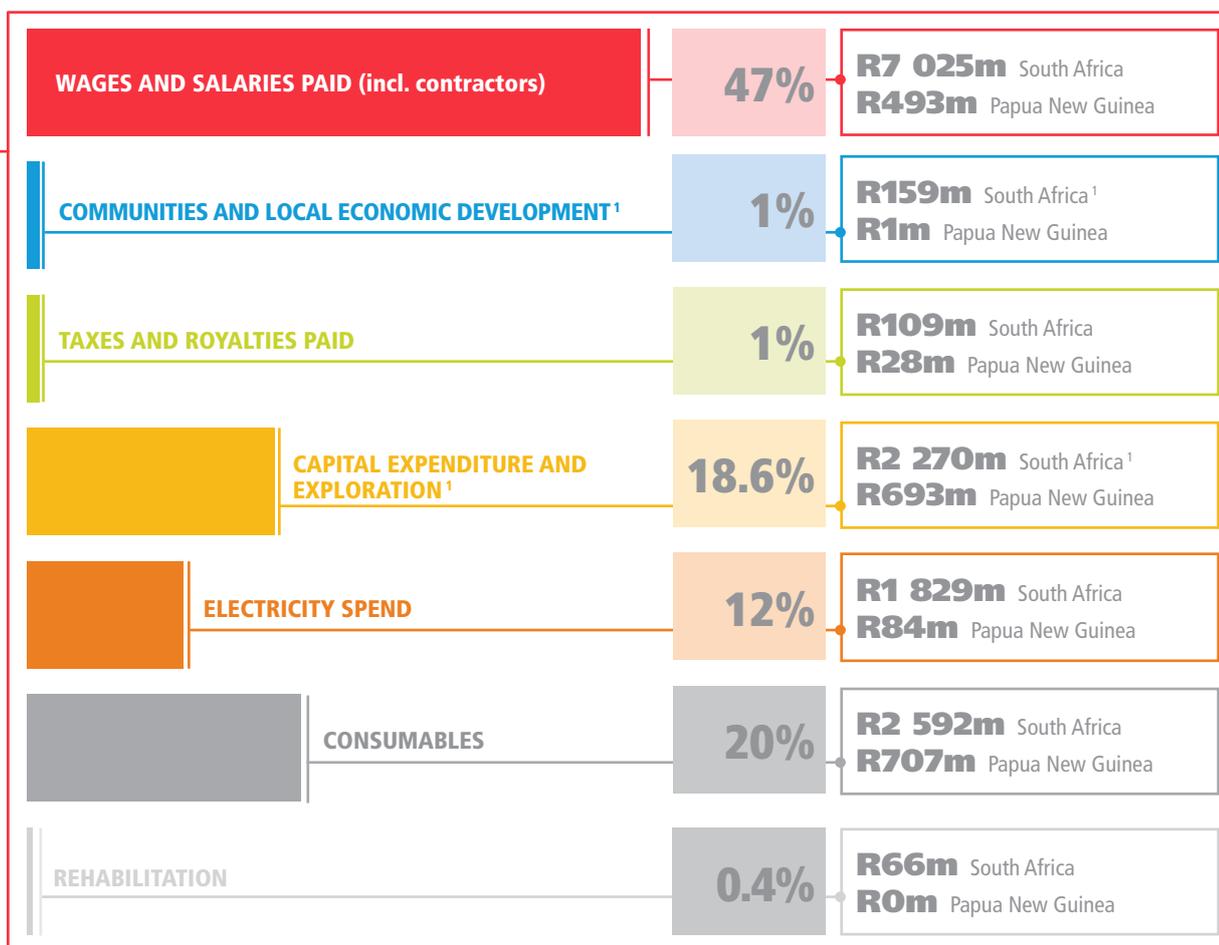


**DIVESTMENT AND CLOSURE**  
Mine closure and land rehabilitation

VALUE DISTRIBUTED

SHARE OF VALUE CREATED

BY COUNTRY



<sup>1</sup> Capital of R89 million was spent on upgrading hostel accommodation in South Africa. This amount was included in our communities and local economic development spend and excluded from capital expenditure.

# BOARD AND MANAGEMENT



## **BOARD**

### **Chairman**

#### **PATRICE MOTSEPE (53)**

*BA (Legal), LLB*

Appointed to the board on 23 September 2003, Patrice became non-executive chairman during 2004. He was a partner at one of the largest law firms in South Africa, Bowman Gilfillan Inc. He was a visiting attorney in the United States with the law firm, McGuire Woods Battle and Boothe. In 1994 he founded Future Mining, which grew rapidly to become a successful contract mining company. He then formed ARMgold in 1997, which listed on the Johannesburg Stock Exchange in 2002. ARMgold merged with Harmony in 2003 and this ultimately led to the takeover of Anglovaal Mining Limited.

In 2002 he was voted South Africa's Business Leader of the Year by the chief executive officers of the top 100 companies in South Africa. In the same year, he was the winner of the Ernst & Young Best Entrepreneur of the Year award. Patrice is a recipient of numerous other business and leadership awards, including:

- World Economic Forum Global Leader of Tomorrow, 1999
- Afrikaanse Handelsinstituut, MS Louw Award for Exceptional Business Achievement, 2003
- Jewish Achievers Awards, Chivas Humanitarian Award, 2013
- BRICS (Brazil, Russia, India, China, South Africa) Business Council, Outstanding Leadership Award, 2014

He is the executive chairman of African Rainbow Minerals Limited and the deputy chairman of Sanlam Life Insurance Limited. He is also a member of the International Business Council of the World Economic Forum, which is made up of 100 of the most highly respected and influential chief executives from all industries. He is a member of the JP Morgan International Council.

His past business responsibilities include being the chairman of the BRICS Business Council for 2013 and president of Business Unity South Africa, the representative voice of organised business in South Africa, from January 2004 to May 2008. He is also president of Mamelodi Sundowns Football Club.

Apart from being a non-independent non-executive chairman, he is also a member of the nomination committee.



### **Independent non-executive deputy chairman**

#### **MODISE MOTLOBA (49)**

*BSc, Diploma in Strategic Management*

Modise was appointed to the board on 30 July 2004. He is the founder and chief executive officer of Quartile Capital Proprietary Limited, a black-owned, managed and controlled niche financial services and investment group with expertise in corporate finance, consulting, treasury services, investments and wealth.

Modise has more than 22 years' working experience in the financial sector both in South Africa and the United States and has operational expertise in treasury services, corporate finance, fund management and wealth management.

He has worked for local and global firms such as Rand Merchant Bank, Goldman Sachs, African Merchant Bank, African Harvest Fund Managers and PwC. In addition to Harmony, he has served on the boards of Deutsche Bank Securities, Landbank, Landbank Insurance and Rand Merchant Bank Structured Insurance. Modise has played organisational leadership roles for the South African Reserve Bank, the Financial Services Board, the Association of Black Securities and Investment Professionals, Nafcoc-Johannesburg Chamber of Commerce and Industries and the Black Business Council.

Chairman of the social and ethics committee and a member of the nomination committee and the audit and risk committee.

### Lead independent non-executive director

#### **FIKILE DE BUCK (55)**

*BA (Economics), FCCA*

Fikile was appointed to the board on 30 March 2006. A chartered certified accountant, she was only the second person to obtain this qualification in Botswana. She was awarded the Stuart Crystal Prize for Best Accounting Student at Birmingham Polytechnic (UK), now Birmingham University, being the first black overseas student to be awarded this prize.

Fikile is a fellow of the Association of Chartered Certified Accountants United Kingdom. From 2000 to 2008, she worked in various capacities at the Council for Medical Schemes in South Africa, including as chief financial officer and chief operations officer. Prior to that she worked in various capacities at the Botswana Development Corporation and was its first treasurer. She also served on various boards representing the corporation's interests, and was the founding chairman of the Credit Guarantee Insurance Corporation of Africa Limited.

She has 23 years' experience in financial reporting at executive level. Fikile is a director of D&D Company Proprietary Limited, a non-executive director and chairman of the audit committee and a member of various other committees of Atlatsa Resources Corporation. She was included in the coffee table book, "South Africa's Most Inspirational Women" (2011). Fikile mentors a number of young people, mostly women. She is also a member of Women In Mining South Africa.

Chairman of the nomination committee and a member of the social and ethics committee, the remuneration committee and the audit and risk committee.



### EXECUTIVE DIRECTORS

#### Chief executive officer

#### **GRAHAM BRIGGS (62)**

*BSc (Hons) (Geology)*

Graham joined Harmony in 1995 as new business manager and was appointed to the board on 6 August 2007. He has been in the mining industry for 43 years, initially as a geological technician, then, after obtaining a BSc (Hons), as a geologist. His operational and managerial experience was developed at a number of South African gold mines and as chief executive of Harmony Australia. Graham is currently vice president of the Chamber of Mines of South Africa. Post year-end, Graham indicated that he will be retiring and will leave the company after a new chief executive officer has been appointed.



## BOARD AND MANAGEMENT CONTINUED



### **Financial director**

#### **FRANK ABBOTT (60)**

*BCom, CA (SA), MBL*

Frank was appointed to the board as non-executive director on 1 October 1994, and as financial director in 1997. In 2004, he was appointed financial director of African Rainbow Minerals Limited, and resigned as such during 2009. He was reappointed financial director of Harmony in February 2012.

Frank joined the Rand Mines Group in 1981, where he obtained broad financial management experience at an operational level. He was a director of various listed mining companies and currently serves as a non-executive director on the board of African Rainbow Minerals Limited.



### **Executive director**

#### **HARRY EPHRAIM "MASHEGO" MASHEGO (51)**

*BA (Education), BA (Hons), (Human Resources Management) Joint Management Development Programme, Global Executive Development Programme*

Mashego joined Harmony in 2005 and has been responsible for group human resources development, transformation and, most recently, government relations. He has more than 20 years' experience in human resources, acquired largely in the industrial sector. Mashego was appointed as an executive director on 24 February 2010.



### **INDEPENDENT NON-EXECUTIVE DIRECTORS**

#### **JOAQUIM CHISSANO (76)**

*PhD*

Joaquim was appointed to the board on 20 April 2005. A former president of Mozambique (1986-2004), he also served as chairman of the African Union for 2003/2004. On leaving the presidency, he established the Joaquim Chissano Foundation for Peace Development and Culture, and has led various international peace initiatives on behalf of the United Nations, the African Union and the Southern African Development Community to Guinea-Bissau, the Democratic Republic of the Congo, Uganda and Madagascar. In 2006 he was awarded the annual Chatham House prize for significant contributions to improving international relations and in 2007 he received the inaugural Mo Ibrahim Prize for Achievement in African Leadership. Joaquim was appointed to the global development programme advisory panel of the Bill and Melinda Gates Foundation in December 2009.

Member of the nomination committee and the social and ethics committee.



#### **KEN DICKS (76)**

*Mine Managers Certificate (Metalliferous Mines), Mine Managers Certificate (Fiery Coal Mines), Management diplomas (Unisa) and (INSEAD)*

Ken was appointed to the board on 13 February 2008. He has a mining engineering background with 39 years' experience in the formal mining industry. He worked for the gold and uranium division of Anglo American plc and its precursor for 37 years in various senior positions.

Member of the technical committee and the investment committee.

**DR SIMO LUSHABA (49)***BSc (Hons), MBA , DBA , CD (SA)*

Simo joined the board on 18 October 2002. He previously held senior management positions at Spoornet (Rail and Terminal Services division), was vice president of Lonmin Plc and chief executive of Rand Water. He is a non-executive director on the board of Cashbuild Limited and facilitates programmes on corporate governance for the Institute of Directors (South Africa), of which he is a member. He was also appointed as an administrator of the South African Post Office to develop the strategic turnaround plan following the resignation of its board.

Chairman of the investment committee and member of the audit and risk committee and the remuneration committee.

**CATHIE MARKUS (58)***BA, LLB*

Cathie was appointed to the board on 31 May 2007. After graduating from the University of the Witwatersrand, Cathie served articles, qualifying as an attorney, notary and conveyancer. She then joined the legal department of Dorbyl Limited before spending 16 years at Impala Platinum Holdings Limited, initially as legal advisor and, from 1998 to 2007, as executive director responsible for legal, investor and community affairs. She is currently a trustee of the Impala Bafokeng Trust and chairs the St Mary's School Waverley Foundation.

Chairman of the remuneration committee and member of the investment committee and the social and ethics committee.

**MAVUSO MSIMANG (74)***MBA (Project Management), BSc*

Mavuso was appointed to the board on 26 March 2011. He has 27 years' experience in management at executive level, and was involved in the successful transformation and restructuring of various state-owned entities over a period of 16 years, until 2010. Mavuso was director-general of the South African Department of Home Affairs and previously served successively as chief executive officer of the State Information Technology Agency, of South African National Parks and of SA Tourism. He was country representative of international development organisations World University Service/Canada and CARE-International in Ethiopia and Kenya. He also held senior management positions with the United Nations Children's Fund and the World Food Programme.

Member of the nomination committee and the social and ethics committee. Successor to the lead independent non-executive director.

**KARABO NONDUMO (37)***BAcc, HDip (Acc), CA (SA)*

Karabo was appointed to the board on 3 May 2013. She is an executive director of KMTech Proprietary Limited – a provider of integrated information and communications technology solutions to enterprises. She has held various roles at Vodacom Group Limited including that of executive head of Vodacom business as well as of Vodacom's mergers and acquisitions. She was inaugural chief executive officer of AWCA Investment Holdings Limited and former head of global markets operations at Rand Refinery Proprietary



## BOARD AND MANAGEMENT CONTINUED

Limited. She was an associate and executive assistant to the former executive chairman at Shanduka Group. She was seconded to Shanduka Coal, where she was a shareholder representative, and also served on various boards representing Shanduka's interests. She is a qualified chartered accountant, a member of the South African Institute of Chartered Accountants and of African Women Chartered Accountants. She is an independent non-executive director of Merafe Resources Limited, Richards Bay Coal Terminal Proprietary Limited, MTN Group Limited's operating companies in Swaziland, Zambia and Sudan. She is on the advisory board of Senatla Capital.

Member of the audit and risk committee and of the technical committee.



### **VISHNU PILLAY (58)**

*BSc (Hon), MSc*

Vishnu was appointed to the board on 8 May 2013 and is currently executive head of Anglo American Platinum Limited's joint venture operations. Before joining Anglo American Platinum in 2011, he was executive vice-president and head of South African operations for Gold Fields Limited and, prior to that, vice-president and head of operations at Driefontein Gold Mine. His 25 years at Gold Fields Limited were interrupted by a two-year period with the Council for Scientific and Industrial Research, where he was director of mining technology and group executive for institutional planning and operations.

Member of the technical committee, the investment committee and the remuneration committee.



### **JOHN WETTON (66)**

*CA (SA), FCA*

John was appointed to the board on 1 July 2011. He was with Ernst & Young from 1967 to 2010, mainly in corporate audit, but for his final 10 years he played a business development role across Africa. He led Ernst & Young's mining group for a number of years and acted as senior partner for some of the firm's major mining and construction clients. He was a member of Ernst & Young's executive management committee and was, until retirement, a member of the Ernst & Young Africa governance board.

Chairman of the audit and risk committee and member of the social and ethics committee, remuneration committee and investment committee.

### **NON-EXECUTIVE DIRECTOR**

#### **ANDRÉ WILKENS (66)**

*Mine Manager's Certificate of Competency, MDPA, RMIIA, Mini MBA Oil and Gas*

André was appointed to the board on 7 August 2007. He was appointed to the board of African Rainbow Minerals Limited in 2004 and was its chief executive officer until March 2012. He is currently executive director growth and strategic development (based in the office of African Rainbow Minerals' executive chairman). He headed ARMgold Limited for five years and ARM Platinum for a year before being appointed chief operating officer of Harmony after its merger with ARMgold in 2003. André has more than 46 years' experience in the mining industry, particularly in gold, platinum group metals, iron ore, manganese, coal, chrome, nickel and copper.

Chairman of technical committee and member of the investment committee and the remuneration committee.

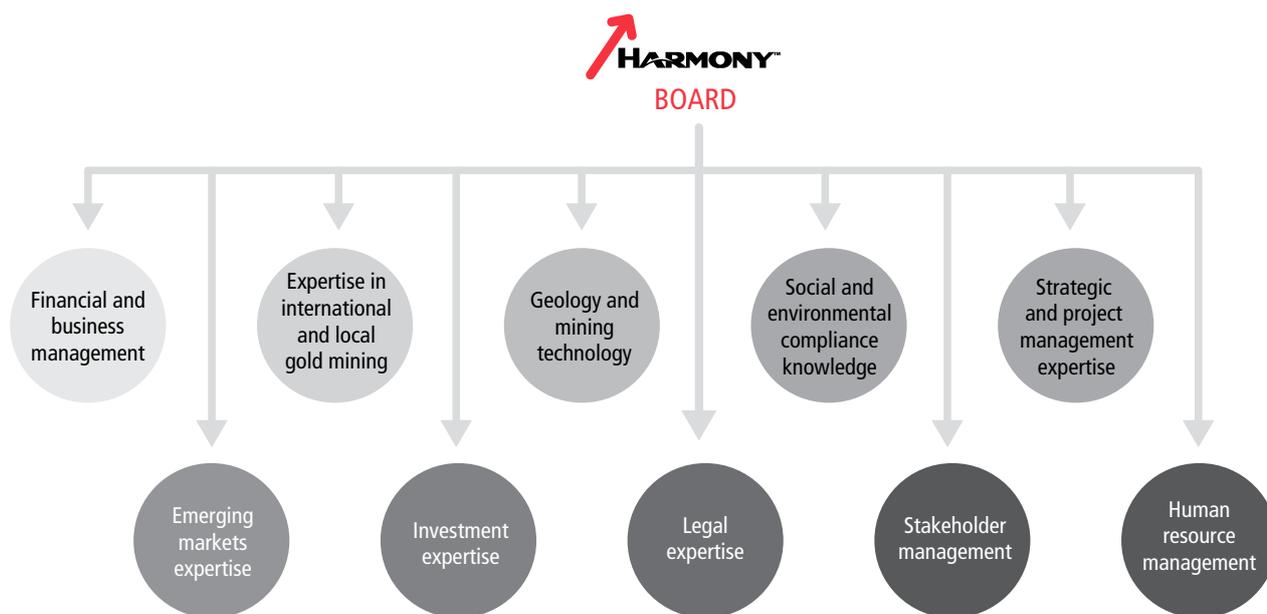


### BOARD COMPOSITION AND SKILLS

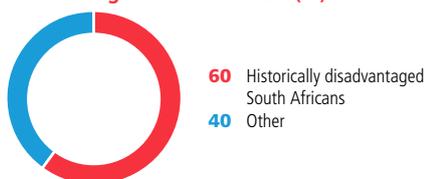
We have paid specific attention to the composition of our board to ensure that it reflects our objectives and that board members have the skills and expertise necessary to contribute to the sustainability of our company. Harmony has a unitary board comprising a majority of independent non-executive directors. We exceed the 2014 Mining Charter requirement that 40% of the board be drawn from historically disadvantaged South African groups. At year-end, that representation was 60%. Three of Harmony’s non-executive directors are women and, in total, nine directors are drawn from groups considered to be historically disadvantaged South Africans.

Critical to the achievement of our strategy is ensuring the company consists of teams with the skills and vision necessary to reach strategic targets. The board is no exception – it is made up of individuals who understand our industry, our sector and our strategy. The diagram below explains the skills of our board members that are integral to our strategic development.

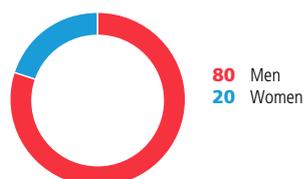
#### HARMONY BOARD: SKILLS



Composition of the board – by historically disadvantaged South Africans (%)



Composition of the board – by gender (%)



Composition of the board – by director (%)



# BOARD AND MANAGEMENT CONTINUED



## EXECUTIVE MANAGEMENT

**Executive: Mineral resources development and growth**

**JACO BOSHOFF (46)**

*BSc (Hons), MSc, MBA, Pr Sci Nat*

Jaco joined Harmony in April 1996. He has been in the mining industry for 20 years, initially as a geologist. Most of his career has been spent with Harmony, progressing from ore reserve manager at various operations to being the executive responsible for reserves and resources. He has been Harmony's designated competent person for statutory reserves and resources reporting since 2004.



**Executive: Human resources**

**ANTON BUTHELEZI (51)**

*National diploma (Human Resources Management), BTech (Labour Relations Management), advanced diploma in labour law*

Anton rejoined Harmony in 2005 as human resources manager at Evander. He has more than 24 years' experience in human resources management in the mining industry. Previous positions include senior human resources officer at AngloGold Ashanti Limited, and mid and senior managerial positions in the same field at African Rainbow Minerals Gold, Samancor Chrome and Harmony. He has a proven track record in the full spectrum of human resource functions. Anton also has an outstanding record in managing labour matters, especially in conducting and guiding negotiations with organised labour. He participates in the Chamber of Mines' gold sector caucus.



**Executive: Environmental management**

**MELANIE NAIDOO-VERMAAK (41)**

*BSc (Hons) (Industrial Microbiology), MSc (Sustainable development) (UJ) and MBA*

Melanie joined Harmony in 2009. Her expertise in sustainable development was built over 17 years in the private mining and public sectors in South Africa as well as in international environmental management exposure gained in the United Kingdom, Australia, Papua New Guinea, Fiji and elsewhere in Africa. She has worked at leading international mining companies, including De Beers Consolidated Mines Limited, BHP Billiton Limited and Anglo American plc. She currently holds directorships at Western Basin Environmental Corporation Proprietary Limited, Harambe Mineral Resources Proprietary Limited and Phoenix Corporation (Business Ventures Investment No 1692 Proprietary Limited), is chair of Harmony's environmental trusts and is a member of Harmony's social trust. In addition, she is a member of the Chamber of Mines' environmental policy committee, the Far West Rand Dolomitic Water Association and Mining Industries Group. She is also a board member of CareSA.



**Chief operating officer: South Africa**

**ALWYN PRETORIUS (44)**

*BEng (Mining Engineering), BEng (Industrial Engineering), Mine Manager's Certificate of Competence*

Alwyn joined Harmony on its merger with African Rainbow Minerals Gold Limited in 2003. He has 21 years of underground deep-level gold mining experience in different supervisory and management positions. Before assuming his current role, he was the

executive responsible for health and safety. He also serves as the chairman of the board of directors of Mine Rescue Services. Post year-end, Alwyn resigned as chief operating officer and will leave the company at the end of November 2015.

### **Executive: Corporate and investor relations**

#### **MARIAN VAN DER WALT (42)**

*BCom (Law), LLB BCom (Law), Higher Diploma in Tax, Diplomas in Corporate Governance and Insolvency Law, Certificates in Business Leadership*

Marian, an admitted attorney and conveyancer, has been employed by Harmony since February 2003. She was appointed company secretary in 2003 and joined Harmony's executive committee in 2005 as executive: legal and compliance (which included taking responsibility for company secretarial, risk management, internal audit and Sarbanes-Oxley compliance). In 2008, she resigned as company secretary, enabling her to accept her current position as executive: corporate and investor relations. Marian began her career as an attorney and conveyancer in 1998 and held positions at Routledge Modise Attorneys, Deloitte & Touche and the Standard Bank of South Africa Limited. Marian also serves on the board of Rand Refinery Proprietary Limited as a non-executive director and served on the Johannesburg Stock Exchange's Social Responsibility Index Advisory Committee until May 2015.



### **Chief executive officer: South-east Asia**

#### **JOHANNES VAN HEERDEN (43)**

*BCompt (Hons), CA (SA)*

Johannes joined Harmony in 1998 and was appointed chief executive officer of its south-east Asia operations in 2008. He is responsible for Harmony's Papua New Guinea assets including an extensive exploration portfolio and the Morobe Mining Joint Ventures' assets. He joined Harmony as financial manager with operational and group reporting responsibility for the Free State region. He was appointed group financial manager in 2001, and relocated to Harmony south-east Asia as chief financial officer two years later.



### **Executive: Risk management and services improvement**

#### **ABRÉ VAN VUUREN (55)**

*BCom, Development Programme in Labour Relations, Management Development Programme, Advanced Labour Law Programme, Board Leadership Programme*

Abré joined Harmony in 1997. He has more than 31 years' experience in the mining industry, specifically in finance and human resources at various gold mines and collieries in the Rand Mines Group. As a member of Harmony's executive committee, he was initially responsible for industrial relations. He has held various positions in services and human resources prior to accepting his current position.



# BOARD AND MANAGEMENT CONTINUED



## REGIONAL GENERAL MANAGERS

### Regional general manager

(responsible for Masimong, Joel, Unisel and Bambanani mines)

#### **JAMES MUFARA (41)**

*B.Sc. (Hons) (Mining), MBA, Mine Manager's Certificate of Competency*

James joined Harmony in 2011 as a general manager. He has been a regional general manager since 2012, a title previously known as operating officer. James has gained extensive operational and management experience in asbestos, nickel and gold mining, with 17 years' experience in the mining industry in total. He has worked in Zimbabwe and South Africa. He was previously a council member of the prestigious Association of Mine Managers of South Africa.



### Regional general manager

(responsible for Target, Phakisa and Tshepong mines)

#### **BEYERS NEL (38)**

*B. Eng (Mining Engineering), MBA, Professional Engineer (Pr. Eng)*

Beyers joined Harmony on the merger with African Rainbow Minerals Gold in 2003. He has 15 years' experience in gold mining, gained on a variety of opencast, deep and ultra-deep gold mines in both supervisory and management positions. Before assuming his current role, he was general manager of Harmony's Phakisa mine. Beyers is currently the vice president of the Association of Mine Managers of South Africa.



### Regional general manager

(responsible for Kusasalethu, Doornkop and Kalgold mines)

#### **PHILLIP TOBIAS (45)**

*B.Sc (Mining Engineering), Wits International Executive Development Programme and GIBS Advanced Management Programme, Professional Engineer (Pr Eng) and Mine Manager's Certificate of Competence*

Phillip Tobias joined Harmony on 1 July 2014 as the regional general manager for Kusasalethu, Doornkop and Kalgold. He has been in the mining industry for more than 20 years, initially as a postgraduate mining engineer with Gold Fields Limited at their various operations. His operational and managerial experience was developed at a number of gold and platinum mines. Prior to joining Harmony, he was a consulting mining engineer for Anglo American Platinum Joint Venture Operations. He was appointed the first black president of the Association of the Mine Managers of South Africa in 2008.

# UNDERSTANDING HARMONY

## UNDERSTANDING HARMONY

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# OUR BUSINESS CONTEXT

**“THE BUSINESS CLIMATE AND CONTEXT WITHIN OUR COMPANY ARE BOTH DYNAMIC AND COMPLEX AND, IN MANY RESPECTS, ARE AFFECTED BY THE MANY CHANGES IN THE EXTERNAL ENVIRONMENT”**

## Relevant Global Reporting Initiative indicators: G4-EC5

At Harmony we understand that, as a business, we operate in a complex and ever-changing external environment – one that encompasses social, economic and environmental changes in the short, medium and long terms. At the same time, the business climate and context within our company are both dynamic and complex and, in many respects, are affected by the many changes in the external environment. We need to understand the external and internal environments as well as the relationships between the two to help us understand how we should position Harmony for success.

Identifying and understanding the factors that drive our internal and external business context require regular and consistent engagement with our stakeholders (see page 52). This section should be read in conjunction with the section Managing our Risks and Opportunities on page 41.

## UNDERSTANDING OUR EXTERNAL ENVIRONMENT

The mining environment in South Africa has been particularly challenging in recent years. Most notable has been the public debate on mining's contribution to society and, since 2012, the nature of the labour relations environment. The industry and, in many cases, stakeholders have sought as far as possible to minimise negative impacts.

The gold price has been in steady decline since 2012, the first time since 2001, and in tandem prices of our most important inputs have been increasing in real terms.

Over the past year, the average gold price received in US dollars per ounce decreased by 6%, while the average price received in rands per kilogram increased by 4%, due to an 11% weakening in the average R/US\$ exchange rate for the year to R11.45/US\$.

There was a significant reduction in the US dollar gold price over the past year – from US\$1,326/oz at the beginning of the year to US\$1,171/oz at the end of the year. However, there was a concurrent depreciation in the rand:dollar exchange rate, from R10.68/US\$ at the beginning of the financial year to R12.16/US\$ at the end of the period. The depreciation in the rand helped to offset the reduced US dollar gold price with the rand per kilogram price remaining largely range bound during the course of the year.

The significant drop in global crude oil prices over the past year (down by 43.5%) has led to reduced global inflation expectations, which have in turn led to dampened demand for gold as a safe-haven investment. At the beginning of calendar 2015, increased uncertainty as a result of lower-than-expected economic growth in the United States and of the Swiss central bank decision to remove its national currency's floor to the euro, led to a short-lived increase in US dollar gold prices. The increased likelihood of the United States Federal Reserve increasing interest rates during the course of calendar 2015 has once again negatively affected gold prices.

As the financial year advanced, Asian gold consumers, who have been very supportive of the metal for some years, became progressively uneasy as the metal's price declined and fueled increasing market volatility. Investors turned to the growing Shanghai stock market in expectation of better investment returns and delayed gold purchases in anticipation of even lower prices.

After the end of our financial year, the picture changed radically as the Shanghai Stock Exchange's bubble burst and panic selling set in with growing uncertainty over China's slowing economic growth rate and its likely effect on the wider global economy. Prices of commodities such as iron ore have fallen sharply with slackening demand from China's steel mills while oil prices have more than halved as the effects of United States shale gas production became apparent.

Financial and regulatory interventions by the Chinese authorities briefly succeeded in supporting share prices. These interventions were faltering by mid-August this year (2015), leading worried investors across the world to turn to gold, the tried and trusted safe haven.

Annual global gold production of 2 860 tonnes (2014 calendar year) is rapidly depleting the world's ore bodies, which need to be replaced. Over the past few years, the discovery of new profitable and competitive ore bodies has decreased significantly. A slower pace of gold mine growth in calendar years 2015 and 2016 is likely, as lower prices delay new projects and reduce sustaining capital expenditure. Long-term fundamentals remain in place for continued growth in commodity demand. Unlike other precious metals, such as platinum, gold is not an industrial metal; its principal attraction lies in its historic role as a store of value, as a currency or as adornment. Since the financial crash of 2008, increased investment demand – particularly from exchange traded funds, central banks, India and China – has been among the gold market's principal drivers. While demand for all other metals is subject to changing technologies and economic developments, there is always a market for every ounce of newly-mined gold.

Harmony believes the gold price will remain flat in the medium term. In the long term, we may well see an increase in the gold price, as gold has a long history as an investment tool and a store of value. It remains a fairly secure investment. And, while the price may fluctuate, gold is always in demand in some form.

Our external environment is also important as it influences the way in which shareholders perceive investing in South Africa and Papua New Guinea, in investing in gold and, ultimately, in investing in Harmony. While investors may, at present, be generally bearish about the outlook for gold, some feel there are opportunities to trade stocks at certain levels. Shareholders taking a shorter-term view on gold equities are benefiting from the volatility of our share price. Over the past year investor confidence in South Africa has been muted. While most appreciate that there are gold assets worth investing in, they have raised concerns about production losses due to industrial action. Closely linked to this is the concern that higher wage demands will exacerbate the cost challenges most South African mining companies are already facing. Many investors are also apprehensive about the potential changes to legislation both in South Africa and in Papua New Guinea, which could leave mining companies in an unstable regulatory environment. We at Harmony have earmarked these as some of our material risks and address these concerns on page 50.

On the policy and regulatory side, amendments have been proposed to the Mineral and Petroleum Resources Development Act, particularly a proposal that would empower the Minister of Mineral Resources to declare one or more minerals to be strategic and to determine local prices for them. The previous Minister of Mineral Resources, Minister Ngoako Ramatlhodi, suspended its passing into law pending further review. The Department of Mineral Resources and the mining industry disagree on the interpretation of the Mining Charter's ownership requirement – the 26% black ownership of companies – and have separately approached the High Court to resolve the matter. Negotiations with the government on the proposed amendments to the Mineral and Petroleum Resources Development Act and the Mining Charter continue through the Chamber of Mines, on behalf of the gold mining sector.

On the labour relations front, there were signs of a more stable environment in the period under review, though the environment has, by no means, been unchallenging. The 2013 two-year wage agreement came to an end on 30 June 2015. The 2015 negotiations started in May 2015, with the National Union of Mineworkers still being the majority union in Harmony at 66% by the end of June 2015, with the Association of Mineworkers and Construction Union representing 15% of our workforce. At an industry level, representation of union membership of the gold mining companies represented by the Chamber of Mines had the National Union of Mineworkers as the majority union (at 52%) and the Association of Mineworkers and Construction Union at 30% at the end of June 2015 (see the section on Labour Relations on page 79). The 2015 negotiations are focused on the sustainability of the industry, rather than affordability.

A three-year wage settlement was reached with the unions representing the majority of employees at Harmony and was extended to all employees within the bargaining unit. For more detail on the wage agreement, please refer to [www.harmony.co.za/investors/news-and-events](http://www.harmony.co.za/investors/news-and-events).

It remains the responsibility of all role players to create an industry that will attract investment.

Further features of the external environment are increasing expectations and, indeed, the demands of external parties – communities, local governments, non-governmental organisations and others – on the mining sector. As a company, we recognise that Harmony has an important role to play as a corporate citizen. As a result, our relationships with all of our stakeholders are important – we engage and listen before agreeing on mutually beneficial actions. We have sponsored a number of youth development programmes, created job opportunities, built housing for local communities and provided bursaries, to name just a few of our community investment projects. See pages 88 to 98 for more details.

## OUR BUSINESS CONTEXT CONTINUED

### UNDERSTANDING OUR INTERNAL ENVIRONMENT

The most important aspects of our internal environment remain the safety and well-being of our employees, and the integrity and sustainability of our assets. Our internal environment is therefore shaped largely by factors which affect our employees or on which our employees have an impact. The environment and mining processes, combined with the behaviour of people, bring with them certain risks to our employees, which we aim to avoid, mitigate or manage. While we have seen significant improvements in recent years, we remain committed to further improvement, which is why keeping our employees safe and healthy is highlighted in our risks and is one of our material issues. (See page 50).

Occupational health risks are not the only health risks we work to mitigate – in South Africa our employees are at risk of contracting human immunodeficiency virus and tuberculosis, both of which are highly prevalent in our society, and we have put in place various initiatives to treat and prevent these illnesses. For more on this see page 65.

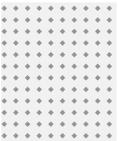
Both in South Africa and in Papua New Guinea, the level of skills among employees and prospective employees remains of great concern. High levels of illiteracy, often combined with relatively low levels of skills, limit the opportunity for growth and development among employees and their progression within the company. At Harmony we believe that our employees should be able to improve their lives through their work. As a result we offer extensive training and development programmes, including adult basic education and training, portable-skills training and on-the-job training. In addition, we invest in community education programmes to ensure that quality education is available at a young age and that promising students are given the tools to thrive. For more on these initiatives see page 88.

We acknowledge the imbalance caused by historical systems in South Africa and work to remedy this through a recruitment policy that focuses on employing historically disadvantaged South Africans at all levels of the company, from the board through to entry-level employees. Harmony is committed to black economic empowerment in South Africa, through direct equity ownership, our procurement spend, management representation and through our employee share ownership scheme, which allows employees to share in the company's success. We have also put considerable time and effort into developing a successful women-in-mining project, which has seen many women find fulfilment in their underground roles. See page 168 for more detail on how we have transformed the company in line with Mining Charter requirements.

By understanding what we need to do to help our employees feel safe and satisfied at work and by implementing various initiatives to achieve this and maintain open communication with them, we manage many of the factors that have an impact on our internal environment. Our emphasis on open communication also allows us to understand any emerging issues that may influence our efforts and gives us time to deal with them before they escalate.



*Masimong underground*



# MANAGING OUR RISKS AND OPPORTUNITIES

## WHY THIS IS MATERIAL TO HARMONY

By identifying and understanding the risks and opportunities facing our business, we are able to mitigate them or manage them to the best of our ability, thereby positioning the company for future challenges and growth prospects.

## OUR APPROACH TO RISK MANAGEMENT

At Harmony, our approach to risk relies on continuously monitoring and, when appropriate, revising our mitigation procedures. Our risk management strategy is a management tool that aims to be practical and effective, rather than focusing only on compliance. For this reason, risk management is embedded within the day-to-day activities of the business, rather than being something that is dealt with only once a year.

## OUR RISK MANAGEMENT PROCESS

Our risk management process is guided by regulatory and legislative requirements, and is championed internally by our chief executive officer. The audit and risk committee plays an oversight role, while management is responsible for implementation and compliance. While the audit and risk committee is responsible for overall oversight of the adequacy and effectiveness of the company's risk management process, the reporting on performance regarding risks is extended for the attention of the various board sub-committees.

Because relationships form part of everything we do, our risk management process is designed to accommodate engagement – from conversations between management and the board regarding risk, to discussions with various stakeholders – to ensure that we are addressing the correct risks appropriately.

The process has its starting point in the group's strategy. We need to understand what can affect our ability to deliver on our strategy, as well as to identify what opportunities will help us achieve our goals. In addition to this we also benchmark the risks and opportunities identified against those of our peers. This helps to ensure that the risks we identify are not only specific to Harmony but also cover industry challenges.

In preparing their formal reports to the board, the executive committee and the audit and risk committee meet quarterly to examine risks and discuss any changes in their importance or in their mitigation. The audit and risk committee's review is supplemented by feedback obtained from the various board sub-committees' reviews of specific risks falling within the ambit of their responsibilities.

Each quarterly examination is based on the experiences at the operations, feedback from key stakeholders, external factors and management meetings. In addition, various teams within the company address risk on a regular basis as part of their day-to-day roles. This creates a continual conversation about risk at different levels, allowing any changes to be captured on a continuous basis.

While risk management forms part of our day-to-day processes, a formal weekly risk review is undertaken by the management teams at our operations, to identify and prioritise specific high-risk issues at an operational level. These risk reviews are reported to the respective regional general managers and further oversight is carried out by the operations' committee on a continuous basis.

## THE ROLES OF THE BOARD AND AUDIT AND RISK COMMITTEE

Risk is a standard item on the agenda of the audit and risk committee meeting and the committee's role played in our risk management process is multi-dimensional.

The audit and risk committee's primary task is to oversee the identification, prioritisation, management and monitoring of risk at Harmony. Our risk management process reflects our integrated approach to business. Therefore the committee – supported by the various board sub-committees – examines all risks affecting our strategy.

To do this, the committee spends considerable time reviewing and evaluating the processes in place to identify, monitor and manage risk. These include our risk management policy and process, our methodology and planning, our formal risk assessment, our internal controls and assurance process, our risk appetite and tolerance and our responses to risks. Once the audit and risk committee is satisfied with these, responsibility for their implementation devolves to executive management and their teams. In their turn, their task is to ensure that these risk processes are constantly applied in the day-to-day operations of the business.

# MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

The audit and risk committee takes its findings from these reviews to the board. The top ten risks and mitigating factors are reported to the board on a quarterly basis.

## OUR ACTIONS IN 2015

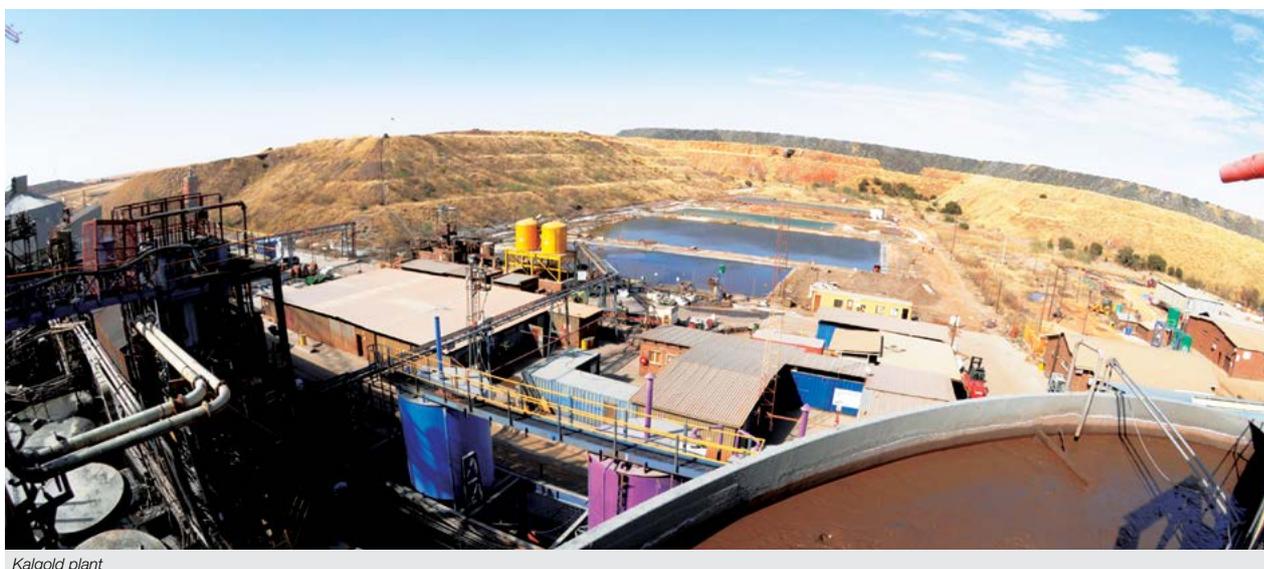
During the year under review, we formulated group-level risk appetite and tolerance levels, and continued to monitor our risks to identify and manage the most material ones facing the company.

While our group-level risk appetite and tolerance levels are subject to formal review on an annual basis, these are continuously monitored for relevance in accordance with changing macro-environment factors, and the tolerance level is further defined at lower/granular tolerance limits per risk. Our group-level risk appetite statement is:

### RISK APPETITE

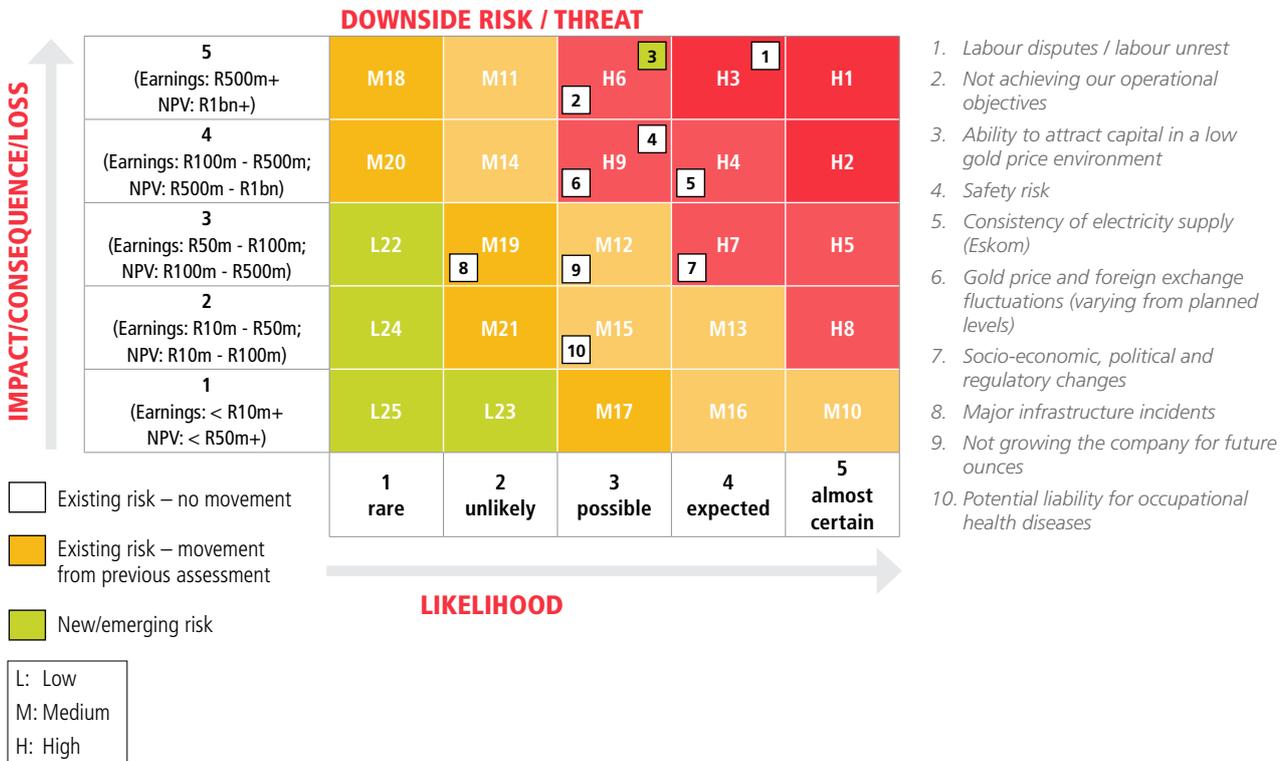
- Harmony is in the business of gold mining in South Africa and Papua New Guinea
- It is a high-risk high-reward business. We are involved in the whole gold mining value chain from exploration, feasibility studies, building and buying mines, operating mines and closing and rehabilitating mines at the end of their life
- We are exposed to the volatility of the gold price and exchange rates, and are unhedged by choice
- We operate well in emerging economies and have the ability to deal with the socio-political dispensations in these countries
- Exploration remains one of the most effective ways to grow an ore-body and create value, and for this reason we continue to invest in exploration
- We have an appetite for change and continuous improvement and are continuously looking for innovative ways to improve our existing mines and acquire mines that we can improve on operationally
- Deep-level gold mining in South Africa is very labour intensive – we have the skills to deal with the challenges of multi-stakeholder labour relations
- We continuously improve the health and safety of our employees
- We have experienced teams with strong values committed to deliver

Various risk factors contain an element of volatility, for example, commodity prices and exchange rates, labour dynamics and the regulatory environment. As a result, our risk profile reflects the dynamics of industry and Harmony-specific issues and opportunities at a point in time.



Kalgold plant

The following two graphs and table show our top strategic risks and opportunities:



# MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

Our risk profile contains potential events and/or factors that pose both a threat as well as an opportunity. These downside and upside risk factors are all duly taken into account in our day-to-day business activities and their recognition plays an integral role in the formation and management of our group strategy.

Risk/Opportunity	Context	Mitigation	Link to strategy
<b>Labour disputes/ labour unrest</b>	<p>In South Africa unstable labour relations are one of the largest risks facing the mining industry as a whole. In recent years there has been an increase in inter-union rivalry and prolonged strikes for higher wages. If unmanaged this could result in industrial action, as well as work stoppages and increased indebtedness for our employees, which could further aggravate the problem.</p> <p>In Papua New Guinea we face both labour and landowner unrest.</p> <p>Apart from the effect this has on our relationships with our employees and communities, it also has the potential to decrease our production, lead to damage to our assets and increase the need for security because of increased safety risks.</p> <p>In addition, prolonged strikes can have adverse financial impacts on employees, Harmony and the surrounding communities – something that undermines our work to bring economic stability to the environments where we work.</p>	<p>This is a risk where we believe that the key to effective mitigation lies in relationships.</p> <p>In South Africa, we have on-going engagement with organised labour, at both mine and company level, and take a pro-active approach to addressing employees' concerns. In consultation with the Chamber of Mines and other gold producers, we pro-actively seek to address labour-related issues to arrive at solutions which will serve the industry as a whole – while being sensitive to the long-term sustainability of producers as well as the needs of the workforce. These considerations will again be relevant to the 2015 wage negotiations in South Africa. We furthermore have contingency plans in place which could be called upon in the event of strike action – such plans address, <i>inter alia</i>, potential safety threats as well as short-term cost curtailment measures.</p> <p>We also embarked on a consultation process on the Employee Relations Policy Framework. In Papua New Guinea we continuously engage with all stakeholders, including employees, provincial and local government, landowners and regulators.</p>	<p>There is no question about the importance of this risk to our strategy – we cannot achieve any of our objectives without the support of the people of Harmony. By maintaining a stable workforce we are able to provide our employees with decent working conditions, while also being able to work consistently to achieve our strategy.</p>

For more on this see page 79.

Risk/Opportunity	Context	Mitigation	Link to strategy
<b>Not achieving our operational objectives</b>	While the risk exists that we may not meet our operational objectives it is something we monitor closely. In particular, unplanned events, operational results, cash flows and gold price fluctuations can all affect our ability to meet our strategic objectives, and so are factors that we watch carefully. Apart from the long-term impact of not meeting objectives on our strategy and sustainability, it can also affect our financial results and investor confidence, and could eventually lead to mine closures.	<p>During FY15 we continued with the identification and implementation of initiatives to improve productivity. This, coupled with stringent cost and capital control measures and the continued focus on engineering risks will remain an on-going process.</p> <p>During the year we completed a life-of-mine optimisation process which resulted in greater focus on mining profitable and higher grade areas at our South African operations.</p> <p>We responded to a lower gold price by rationalising our assets and restructuring our portfolio. We will continue to improve the performance of our assets by focusing on mining only safe, profitable ounces. For more on this refer to page 120 of the Operational Performance section of this report.</p>	Ultimately, Harmony needs to be a successful, resilient business before it can be a responsible corporate citizen and employer of choice. As a result, achieving our operational objectives is the crux of our strategy, as it allows us to strengthen and grow our business and to ultimately share the rewards with our stakeholders.
<b>Ability to attract capital in a low gold price environment</b>	<p>In order to grow our business we need to be able to fund projects and capital expenditure. While the mining industry is currently experiencing a cyclical downturn, the challenges of raising capital are exacerbated by rising costs, a global lack of appetite for gold investments and investors' focus on capital discipline and cash margins.</p> <p>The South African socio-economic climate furthermore creates uncertainty for investors, and while commodity prices remain low we may struggle to remain competitive – all this can impact our long-term investment case and stunt our ability to create value.</p>	To keep our cash flow healthy, a variety of mitigating actions are considered. These include focused efforts to achieve our operational objectives, as noted in the previous risk, as well as monitoring of capital markets for opportunities. While our focus remains on mining only safe and profitable ounces, we also evaluate other strategic solutions to unlock the value of our existing assets – strategies which need to respond to share price pressures and our ability to continue the funding of existing and future expansion and exploration projects.	The ability to raise funding is integral to our strategic intent of growing our business and to maintain our ability to create value.

# MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

Risk/Opportunity	Context	Mitigation	Link to strategy
<b>Safety</b>	Deep-level mining has inherent safety risks. We prioritise safety primarily to protect our people, who are at the centre of all we do at Harmony. Apart from the effect safety has on our employee mindsets and productivity, it also has the potential to affect our reputation, stop production, lead to litigation and decrease the overall value of Harmony. We view safety as an opportunity to engage with many key stakeholders, particularly our employees, and to entrench our values.	<p>Safety is one of our five fundamental values, making it the basis of all we do. Apart from the everyday safety procedures we have in place, we also engage with employees regularly on the topic through training sessions and open discussions.</p> <p>We maintain a risk-based safety management system that is integrated into our daily work philosophy and we continuously adopt the industry's leading safety practices.</p> <p>We also believe that if an incident happens it is best to learn from it. As a result our safety department verifies and evaluates every injury on an on-going basis. In addition, we have also standardised auditing and reporting of physical conditions at workplaces.</p> <p>For more on this refer to page 61 of the Safety and Health section.</p>	Safety is integral to the sustainability of our business – it helps foster our relationships with employees, maintain stable production and retain our licence to operate. It is a feature of our values, our material issues and underlies our strategy.
<b>Consistency of electricity supply</b>	Mining is an energy-intensive industry and the cost of energy is material to our total cost base. Our risk related to South Africa's energy crisis is two-fold. Firstly, the rising cost of energy is placing more pressure on our margins. Secondly, the reliability of uninterrupted supply threatens the achievement both of our safety and of our production targets.	<p>While we continue with efforts to focus on the reduction and optimisation of our energy consumption, we are also implementing load shifting opportunities which can be implemented with the least disruption to our operations and employees.</p> <p>Various efforts are under way to identify alternative sources of energy, including renewable energy in our energy portfolio.</p> <p>Our efforts to secure sustainable, reliable and cost-effective energy expand to active participation in collaboration with the South African Minister of Energy to implement a five-point plan aimed at stabilising the country's electricity supply risks.</p> <p>For more detail, see page 104 of the Environmental Performance section.</p>	Mining safe, profitable ounces is integral to the sustainability of our business. Thus, securing energy in a sustainable, cost-effective and uninterrupted manner speaks directly to our business goals and strategy.

Risk/Opportunity	Context	Mitigation	Link to strategy
<b>Socio-economic, political and regulatory changes</b>	<p>It is imperative to our business that we maintain our licence to operate. This means that we need to stay up to date and comply with all necessary socio-economic, political and regulatory changes in both South Africa and Papua New Guinea.</p> <p>In South Africa these regulations include existing and new labour legislation, political and regulatory changes, and Mineral and Petroleum Resources Development Act amendments, among other regulatory requirements.</p> <p>In Papua New Guinea, we adhere to local legal and fiscal framework changes, while also addressing increased socio-economic investment expectations.</p> <p>Not meeting these requirements could impact our reputation and investor confidence in our business. It could also mean that we need to pay fines for non-compliance or that we could lose our licence to operate.</p>	<p>We believe that the key to mitigating this risk is to develop and maintain healthy relationships with the parties involved, so as to always understand what is expected from us. For more on our stakeholder engagement during the year see page 52.</p> <p>In South Africa, we have regular interactions with the regulator as a contribution to influencing legislation as well as regular meetings with community leaders to address community concerns. In addition we align our social and labour plans with municipal Economic Development Plans, and we keep organised labour abreast of developments in labour legislation.</p> <p>During FY15, the Department of Mineral Resources and the mining industry agreed to seek a declaratory order from a South African court to address a difference of opinion on how some black empowerment transactions are recognised. Harmony is part of this pro-active collaboration and we believe that our performance in terms of each of the nine pillars set out in the Mining Charter illustrates that we do more than just comply.</p> <p>In Papua New Guinea, the Morobe Mining Joint Ventures, Harmony and the local Chamber of Mines collectively participate in industry consultation.</p>	<p>Maintaining our licence to operate is a material issue for us, as we recognise the requirements of South Africa and Papua New Guinea, and strive to be a socially responsible company. In addition, maintaining our right to mine is at the heart of our strategy, as it allows us to continue operating and building a sustainable business that shares the benefits we create.</p>

# MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

Risk/Opportunity	Context	Mitigation	Link to strategy
<b>Major infrastructure incidents</b>	As a mining company, we rely on large infrastructure in order to maintain operations at our mines. Any breakdowns or infrastructure failures have the potential to cause production losses and expensive damage that could take time to repair as well as threaten the safety of our employees.	We spend a considerable amount of time on the maintenance of infrastructure to proactively address any potential problems. During the prior financial year, we strengthened our senior engineering capacity and improved our operational risk management processes. Furthermore, in line with our focus on engineering risks, we implemented a holistic engineering strategy during the year under review. For more on this see page 121.	Much like achieving our operational objectives, avoiding major infrastructure incidents relates to the everyday business side of our strategy – the only way to ensure a sustainable business is to continue mining daily, and we require functional, safe infrastructure to do so.
<b>Growing the company for future ounces</b>	A risk facing any mining company is that of sustainable production and of maintaining reserves and resources. Harmony is no different and we use exploration as an opportunity to improve our future production. However, we are aware of and need to manage the opportunity loss associated with not increasing our ore reserves sufficiently. Also, we face the risk that exploration may not result in a reserve base increase. All of this can affect investor confidence in us and our growth strategy.	<p>We face this from various sides. In order to maintain a competitive advantage, we aim to be one of the lowest cost producers (R/tonne) in the sector. In ensuring that exploration leads to sufficient resources, we have established a new business team to review and recommend opportunities to the board as well as scientific targeting of exploration targets and professional exploration teams. During the year under review we established an exploration joint-venture with a junior mining company adjacent to one of our Free State mineral rights areas. This joint venture will aid us in growing our company in an economical manner.</p> <p>In Papua New Guinea, we are actively pursuing the development of the Golpu project in order to gain exposure to copper. In South Africa we are evaluating opportunities where we can exploit our existing operating strengths while diversifying. Furthermore, we will continue to focus on mining only safe, profitable ounces.</p> <p>For more on this, see the sections in this report entitled Projects and Exploration on page 153 and Resources and Reserves on page 159.</p>	In order to remain globally competitive (our ultimate strategic goal), we must continue to have available profitable reserves and resources to mine. By focusing on exploration to secure quality tonnages, we are able to do this.

Risk/Opportunity	Context	Mitigation	Link to strategy
<b>Potential liability for occupational health diseases</b>	<p>This is another industry-wide issue that we, as well as our South African peers, face with regard to work-related illnesses, such as silicosis. The risk is two-fold. Firstly, we need to address what has happened in the past. Secondly, we work now to mitigate occupational health risks to ensure that this risk does not continue into the future.</p>	<p>We mitigate our health risks through a pro-active health strategy as well as an at-work management programme.</p> <p>During the year Harmony and industry peers continued with efforts to develop a long-lasting solution to address the socio-economic impact of silicosis.</p> <p>For more on this see page 69.</p>	<p>Much like the nature of this risk, the impact it could have on our strategy is two-fold. Firstly, our people are at the heart of our business and we want to do all we can to ensure they remain healthy. Secondly, the potential liability could decrease our cash flow and make us less resilient in the future.</p>
<b>Gold price and foreign exchange fluctuations (varying from planned levels)</b>	<p>We are highly geared to the gold price and foreign exchange fluctuations. An improvement in the gold price provides an immediate advantage, while lower gold prices decrease our margins.</p> <p>Our ability to deliver on production and growth targets to counter lower commodity cycles is important.</p>	<p>Mitigation includes conservative planning parameters with re-designed planning processes to focus on de-bottlenecking and optimisation.</p> <p>Mitigation also includes the rescheduling of capital expenditure and ensuring that sufficient funding facilities exist.</p>	<p>Ultimately, Harmony needs to be a successful, resilient business before it can be a responsible corporate citizen and employer of choice. As a result, being profitable and achieving our operational objectives are the crux of our strategy, as they allow us to strengthen and grow our business and, ultimately, to share the rewards with our stakeholders.</p>
<b>Productivity</b>	<p>To be a successful business, we need to produce enough gold to be profitable. This relates to productivity which is affected, in simple terms, by labour. If we have enough skilled, healthy, motivated and safe working labour, we are able to produce our targeted gold production. In addition, we focus on infrastructure, technical efficiencies and safe working areas.</p> <p>Productivity is both a risk and an opportunity for Harmony. If well-mitigated/managed it means we are able to produce volumes that are either in line with or above expectations. This, in turn, strengthens our business. However, if we produce below target it can destabilise our business, and make it harder for us to reach other business targets. As a result it is essential that we are producing enough tonnes or ounces per person working.</p>	<p>This is a complex risk, and we therefore mitigate it in various ways. These include a proactive health strategy and at-work management programme. See page 65 in the Safety and Health section for more on this.</p> <p>As with many of our risks we recognise how important relationships are in managing productivity and we work with both organised labour and our employees to prevent absenteeism.</p>	<p>A stable workforce enables sustainable productivity which is imperative for achieving our business goals.</p>

# MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

Risk/Opportunity	Context	Mitigation	Link to strategy
<b>New technology</b>	New technology provides us with an opportunity to increase our competitive advantage and make our business model more resilient as we move into the future. For example, we can use new technology to respond to cost pressures such as electricity tariff increases and labour, which will allow us to make our production and costs more efficient. This, in turn, can help us increase revenue and share more benefits.	Ways in which we are working on capitalising from new technology include safety improvements, energy efficiency, alternative energy mix, water conservation technology, nuclear radiation rehabilitation and we also continue to evaluate new mining methods. For more on this, refer to page 65 of the Safety and Health section, page 112 of the Environmental Performance section and page 120 of the Operational Performance section of this report.	Every one of our strategic objectives can be enhanced by embracing innovation through new technology which will increase efficiencies, productivity and safety.

For more detailed information pertaining to risk factors and their potential impact see the Form 20-F as filed with the United States' Securities Exchange Commission at [www.harmony.co.za/investors/reporting/20f](http://www.harmony.co.za/investors/reporting/20f)

## MATERIAL ISSUES

Our process of determining material issues emanates from our risk management process. We combine this with the Global Reporting Initiative's materiality assessment, in which we perform a gap analysis and benchmark against our peers to determine our key indicators. In addition, we consider those indicators that are most closely related to our values and strategy. From this process, we have derived the following five material issues, which encompass most of our key risks while also addressing our values.

### 1. Keeping our people safe and healthy

People are at the centre of our business. While we have made significant progress in recent years in improving safety and health underground, safety remains a priority for us. Measured in terms of fatalities, Harmony achieved the best safety performance recorded in 14 years. The fatal injury frequency rate for our South African operations decreased by 61% to 0.11 per million hours worked (FY14: 0.28). The fatal injury frequency rate for the Papua New Guinea operations for the year was 0.22 (FY14:0.00) per million hours worked. The lost-time injury frequency rate for the South African operations was 9.57 per million hours worked (FY14: 8.09), a deterioration of 18%, mainly as a result of the Kusasaletu fire incident where 152 people were classified as lost time injuries, while that for the Papua New Guinea operations was 3.79 (FY14: 0.00). In all, 24 514 shifts were lost due to occupational injury in South Africa (FY14: 25 338) and 24 in Papua New Guinea (FY14: 0). We will continue with a pro-active people-focused approach, placing attention in the areas of training and communication to entrench safe behaviour in the workplace. We understand the need to make further safety advances by applying new technology and/or by advancing protection equipment. Physical danger is not the only threat to our employees who also face occupational health risks from working underground. We address all operational health risks and offer treatment for a variety of other health problems. We believe that prevention is better than cure and our pro-active health strategy and programmes are integrated and holistic. Our aim is to ensure our employees return home safely and in good health. For more on safety and health see page 58.

**Relevant Global Reporting Initiative indicators:** Occupational health and safety (G4-LA6, G4-LA7)

**Related values:** Safety, Accountable, Connected

**Related key risks/opportunities:** Safety, potential liability for occupational health diseases, achieving our operational objectives, productivity

# MATERIAL ISSUES CONTINUED

## 2. Achieving our business objectives

The success of our core business drives what we do and what we are able to do. This does not mean that we are focused only on short-term success. As explained in the section Our Strategy and Investment Case (see page 25), our aim is to create a viable business for years to come. As a result, we also consider our future objectives, such as using technology and innovation, diversifying our resource base, and ensuring we have projects in place to sustain and grow our production.

**Relevant Global Reporting Initiative indicators:** Economic performance (G4-EC1, G4-EC7, G4-EC8)

**Related values:** Accountable, Achievement

**Related key risks/opportunities:** Safety, achieving our operational objectives, discovery/ acquisition of quality ore reserves, ability to attract capital in a low gold price environment, new technology, productivity improvements

## 3. Maintaining stability in our workforce

Amid a potentially fractious industrial relations environment in the South African mining industry, we focus on having positive and open relationships with our employees and the trade unions that represent them. By fostering conversation, we understand and are able to address grievances before industrial action. The benefits of a stable industrial relations climate are extensive. We want to create workplaces where employees feel safe, respected and valued. A stable workforce contributes to our aim of meeting our business objectives, as it results in lower employee turnover and stabilises production. The benefits of this are shared with employees through production bonuses, reward and recognition programmes and the employee share ownership scheme. For more on these see page 78.

**Relevant Global Reporting Initiative indicators:** Labour/management relations (MM4), Employment (G4-LA1)

**Related values:** Honesty, Connected and Accountable

**Related key risks/opportunities:** Labour disputes/ labour unrest, safety, achieving our operational objectives

## 4. Protecting our licence to operate

To be a successful company, we need to earn and retain our right to mine. This requires a clear understanding of local legislation and regulations, as well as solid relations with government, communities, industry bodies and local business partners. We seek more than compliance: we will transform our workforce, ensure good corporate governance, and be a responsible corporate citizen. For more on our compliance see page 179.

**Relevant Global Reporting Initiative indicators:** Diversity and equal opportunity (G4-LA12), Local communities (G4-S01), Environmental compliance (G4-EN29)

**Related values:** Accountable, Honesty

**Related key and/or opportunities:** Socio-economic, political and regulatory changes

## 5. Managing our impact

The resources available to our business are finite and we respect this. We are environmentally responsible through careful monitoring of our consumption, emissions and impact. Our commitment to improving health and safety speaks to our need to protect human resources, while our training and development programmes highlight how we encourage each employee to learn and grow their skills. Responsible resource management is also crucial to our socio-environmental rehabilitation planning. While our mines are operational, we want to do all we can to improve the living conditions of employees and communities, and to bolster both socio-economic and ecological developments, so that when our mines close we will leave behind us viable communities able to support their economies and which are not plagued by environmental or health issues. This entails planning now, ahead of mine closure, and is something we are constructively working towards. For more on our skills training and rehabilitation initiatives see pages 81 and 116 respectively.

**Relevant Global Reporting Initiative indicators:** Energy (G4-EN5), Effluents and Waste (G4-EN22, G4-EN23, G4-EN24, MM3), Local communities (G4-S02, MM6, MM7)

**Related values:** Safety, Accountable, Honesty

**Related key risks/ opportunities:** Major infrastructure incidents, socio-economic, political and regulatory changes



# STAKEHOLDER ENGAGEMENT

## WHY THIS IS MATERIAL TO HARMONY

To be a profitable, responsible and sustainable business we must have mutually beneficial and sustainable relationships with our various stakeholders. In pursuit of this, we believe it essential that we understand and meet our stakeholders' needs where possible. Effective engagement is essential to the establishment of such mutually beneficial and sustainable relationships.

### Relevant material issues:

- Maintaining dialogue and promoting stable relations in our workforce
- Engaging with our shareholders to create an understanding of the company's investment case
- Protecting our licence to operate
- Ensuring that host communities have a voice in our business
- Ensuring alignment with government imperatives as they relate to our business

## OUR APPROACH TO STAKEHOLDER ENGAGEMENT

To Harmony, stakeholder engagement is not just about policies and guidelines. Effective stakeholder relations are about building lasting relationships, and making a meaningful contribution to the communities and countries in which we work.

Our stakeholders include, but are not exclusively, shareholders, our employees and contractors, communities in the areas in which we operate, trade unions, government regulatory bodies, suppliers, analysts and the media.

The primary aim of communicating with stakeholders is, simply, to share and gather information to inform our business decisions. This communication is guided by both our values and our strategic intent:

- **Improve the lives** of host communities/stakeholders through participation in appropriate programmes or projects
- **Find solutions** to the various challenges facing our society and host communities, including unemployment and lack of economic activity, by collaborating with stakeholders and forming meaningful partnerships
- **Find a balance** between the expectations of stakeholders and shareholders

Our communication with stakeholders is inclusive, so that this communication is:

- **Meaningful**, and addresses what is material to stakeholders
- **Complete**, so that we understand the views, needs, perceptions and expectations linked to issues that stakeholders view as material
- **Responsive**, so that we respond to material issues timeously, coherently and appropriately

Our approach to communication, with internal and external stakeholders, is integrated into the way we do business. Stakeholder relations are an integral part of our business and shape our actions in determining strategy, addressing problems, and allocating resources.

Effective stakeholder engagement helps us better manage risks, opportunities, and enhances the company's reputation, which is essential to the long-term sustainability of Harmony. Furthermore, effective, meaningful stakeholder engagement contributes to our store of knowledge as a company and provides information which leads to improved decision-making processes.

Every executive member of Harmony is involved in building and maintaining stakeholder relationships – both internal and external. The board social and ethics committee oversees stakeholder relations, while the board itself monitors relations with stakeholders.

## OUR STAKEHOLDERS

Our engagement complies with relevant legislation and standards, including ISO 14001, OHSAS 18001 and ISO 9000. Using our stakeholder engagement policy and strategy we identify various stakeholders, internal and external, across our business process. In conjunction with this, and in line with ISO 14001 implementation, a formal stakeholder analysis was conducted using experienced, external social consultants. From these two processes, we developed the following stakeholder map.

## OUR ENGAGEMENT IN 2015

Below, we have detailed our communication with key stakeholders, highlighting their expectations as communicated to us, the specific benefits to be gained from effective communication and information on our interaction with each stakeholder during the year. In all our engagements with stakeholders, we strive for communication that is regular, consistent, relevant and transparent.

# OUR STAKEHOLDERS

**“OUR STAKEHOLDER ENGAGEMENT IS ABOUT MORE THAN POLICIES AND GUIDELINES, IT IS ABOUT BUILDING LASTING RELATIONSHIPS AND MAKING MEANINGFUL CONTRIBUTIONS.”**

- Internal stakeholders
- External stakeholders



## SHAREHOLDERS

**Expectations:** Consistent returns and growth in investment directly and relative to peers, timely and transparent disclosure on objectives, performance and expectations.

**Benefits of engagement:** Share price resilience, continued investment, creating an understanding of the company’s short- and long-term objectives; open, on-going conversation allows us to deal with any concerns or queries at an early stage.

**Discussions during the year:** Shareholders asked questions pertaining to planned and on-going restructuring, expectations on wage negotiations, impact of power supply restrictions in South Africa, clarity on changes to grade and planned improvements, production, safety, Harmony’s strategy, our ability to fund Golpu, and sustaining cash flows.

How we engage	How often
Information and compliance releases through the Stock Exchange News Service of the Johannesburg Stock Exchange and through the Electronic Data-Gathering, Analysis and Retrieval system of the United States Securities and Exchange Commission	As required and on-going
Harmony and related South African gold mining industry websites ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> , <a href="http://www.thisisgold.co.za">www.thisisgold.co.za</a> and <a href="http://www.goldwageningenotations.co.za">www.goldwageningenotations.co.za</a> )	On-going
Releases and information sent to the shareholder database	On-going
Results presentations and webcasts	Quarterly
Ad hoc presentations on specific issues	As required
Conferences	Throughout the year, the chief executive officer and senior executives present the Harmony story at global conferences and/or by means of virtual conferences.

# STAKEHOLDER ENGAGEMENT CONTINUED

How we engage	How often
Investor roadshows	Throughout the year. Travel has been reduced in line with our cost-saving initiatives. More regular calls (conference and/or one-on-one) have been set up to compensate for not having meetings in person (especially as it relates to international investors). We have also explored participation in virtual conferences.
Documents and correspondence sent by post and e-mail	Quarterly and as required
Conference calls	On-going
One-on-one meetings	On-going
Integrated report	Annually

## EMPLOYEES AND CONTRACTORS

**Expectations:** A safe, stimulating and rewarding work environment that offers opportunities for personal and career development.

**Benefit of engagement:** A more-engaged organisation with a clear vision, fewer strikes, high levels of productivity, low turnover.

**Discussions during the year:** In our engagements with employees the following issues have been raised and discussed – safety and health, operational challenges, asset optimisation, productivity improvements, recognition and rewards, wage negotiation demands, and opportunities at other Harmony mines.

How we engage	How often
Employee engagement surveys	Annually
Meetings with organised labour	On a regular basis
General manager's presentations to all mine employees	Quarterly
General manager's mass meetings	Monthly
Chief executive officer roadshows to all our operations	Every six months
Future forums, mass meetings, work groups	On-going
Workshops	As required
Newsletters, mine TV, podcasts, text messages, posters, emails, intercom system, desktops, screen savers and signage	On-going
Harmony website ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> )	On-going
Twitter	Daily
Intranet (local, internal Harmony internet)	On-going
Company emails	Weekly
Sport at shafts (such as cricket, soccer, netball or rugby) is used to share information and build relationships	On-going
Shaft and cultural events	When required
Briefs or memos	When required
Communication campaigns	When required
Suggestion box at all operations	Weekly
Community media houses (newspaper and radio)	When required
Harmony and related South African gold mining industry websites ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> , <a href="http://www.thisisgold.co.za">www.thisisgold.co.za</a> and <a href="http://www.goldwageningenegotiations.co.za">www.goldwageningenegotiations.co.za</a> )	On-going

## GOVERNMENT AND REGULATORS

**Expectations:** Compliance to host country legislation, cooperation and continual improvement and contribution to national policy formulation.

**Benefit of engagement:** The regulator and Harmony are better able to engage and reach agreement on compliance and our licence to operate.

**Discussions during the year:** During engagement with the government and regulators this year certain regulatory matters were brought to our attention and we were encouraged to participate in joint initiatives, such as the Deputy President's Framework Agreement for a Sustainable Mining Industry. We were also closely involved in influencing legislative changes such as those proposed to the Mineral and Petroleum Resources Development Act, environmental management plans, the National Environmental Management Act, etc.

How we engage	How often
Industry bodies	As an active member of the Chamber of Mines, Harmony contributes to policy formulation
Personal interaction	Dedicated senior executive responsible for government relations
Harmony website ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> )	On-going

## INDUSTRY BODIES

**Expectations:** Mutually beneficial relationships founded on integrity, constructive engagement and mutually beneficial outcomes.

**Benefit of engagement:** Firm understanding of our industry and our place in it.

**Discussions during the year:** During the year under review we worked closely with the Chamber of Mines regarding changes to the Mineral and Petroleum Resources Development Act, we partnered with them and other gold mining companies for a joint communication campaign during the wage negotiations and seeking a declaratory order in respect of the ownership requirement as per the Mining Charter.

How we engage	How often
Conferences	Quarterly
Presentations	On-going
Workshops	As required
Meetings, for special interests such as wage negotiations	As required
Harmony website ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> )	On-going

## SUPPLIERS OF GOODS AND SERVICES

**Expectations:** Mutually beneficial relationships founded on equal opportunity and integrity.

**Benefit of engagement:** Reliable supply chain management. Sustaining solid working relations cements current partnerships and paves the way for future work and a continuous supply of goods and services at the best price.

**Discussions during the year:** We have engaged with suppliers this year on curbing annual increases and to ensure that their processes are in line with our human rights and environmental standards, our code of ethics and our empowerment requirements.

How we engage	How often
Presentations	On-going
Workshops	As required
Harmony website ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> )	On-going
Harmony Enterprise Development Centres	On-going
Written communication	As required
Contractual negotiations	As required
Face-to-face interaction	On-going
Requests for quotations and tenders	As required

## HOST COMMUNITIES, LABOUR-SENDING AREAS AND NEIGHBOURS

**Expectations:** Mutually beneficial relationships founded on shared goals, constructive engagement and long-term commitments.

**Benefit of engagement:** Stable community relations, increased opportunity to make a meaningful difference through appropriate corporate social investment projects, clarity in respect of expectations versus Harmony's commitments to its host communities.

**Discussions during the year:** The most important issues raised by our communities and local government are questions relating to our corporate social investment projects, social and labour plans, job creation, training and the like. In addition, issues/concerns raised regarding our mining activities were discussed and addressed. Major environmental changes or operational changes that will have an impact on the environment were also discussed with surrounding communities. We use all of this to inform our planning for the future. For more on our community relations see page 87.

How we engage	How often
Conferences	Quarterly
Presentations	On-going
Workshops	As required
Community radio and billboards	As required
Harmony website ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> )	On-going
Contractual negotiations	As required
Face-to-face interaction	On-going

# STAKEHOLDER ENGAGEMENT CONTINUED

## MEDIA AND ANALYSTS

**Expectations:** Mutually beneficial relationships founded on mutual respect, open conversation and constructive engagement.

**Benefit of engagement:** Allows outsiders to understand Harmony's story.

**Discussions during the year:** Most questions related to results announcements, labour, wages, costs, grade and environmental issues.

How we engage	How often
Information and compliance releases via the Stock Exchange News Service of the Johannesburg Stock Exchange and via the Electronic Data-Gathering, Analysis and Retrieval system of the United States Securities and Exchange Commission	On-going and as required
Harmony website ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> )	On-going
Presentations	Quarterly and as required
Conference calls	On-going
One-on-one meetings	On-going
E-mail	On-going
Face-to-face interaction	On-going

## TRADE UNIONS

**Expectations:** Mutually beneficial relationships founded on openness and integrity.

**Benefit of engagement:** Constructive engagement to understand issues raised by both the employer and the unions and a willingness to resolve these issues.

**Discussions during the year:** Our engagement with various unions during the year encompassed the recognition of the Association of Mining and Construction Union, de-recognition of the National Union of Mineworkers at Kusasaletu and the transfer of employees from closed shafts to Harmony mines in build-up.

How we engage	How often
Wage negotiations	Every second year
Operational negotiations or consultations	As required, but at least monthly
Presentations	Quarterly
Meetings	On-going
Committees, dealing with issues such as health, safety and employment equity	On-going, but at least monthly
Harmony website ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> )	On-going

## BANKS/FINANCIAL INSTITUTIONS

**Expectations:** Debt investors expect to be rewarded with interest and protected by the certainty that debt covenants will be met.

**Benefit of engagement:** Access to affordable funding, healthy relationships allowing on-going, honest conversation that provides stability.

**Discussions during the year:** The issues that dominate our discussions with banks/financial institutions tend to be cash flow generation, management's response to challenges, updates on operational results, possible corporate action, future strategy, management structures, as well as our future business plans, including the Golpu project.

How we engage	How often
Financial reporting	Quarterly
Presentations, press releases and the Johannesburg Stock Exchange's Stock Exchange News Service	As required
Meetings and discussions	As required
Harmony website ( <a href="http://www.harmony.co.za">www.harmony.co.za</a> )	On-going

# HARMONY IN ACTION

## HARMONY IN ACTION

Safety and health	58
Employees and communities	76
Environmental performance	100
Operational performance	120
Projects and exploration	153
Resources and reserves	159
Mining Charter compliance	168



# SAFETY AND HEALTH

## Achievements

- Measured in terms of fatalities, best safety performance recorded in 14 years
- Participation in an industry working group to address issues relating to compensation and medical care for occupational lung disease in the gold mining industry in South Africa
- Moved away from the historic mine hospital-centric, health service delivery model which is curative in nature, to a more pro-active, preventative model of health service delivery. We have seen significant benefits, such as decreased absenteeism, hospitalisation and medical mortality. Tuberculosis rates have also decreased dramatically, while awareness of the human immunodeficiency virus exceeds the national average. See page 67 for more information
- Collaboration with peers in the industry on various government structures to ensure that there is a robust effective mechanism in place to address silicosis-related challenges

## Challenges

- Behavioural aspects in breach of compliance with standards
- Operational stoppages such as section 54/55 instructions continue to hamper production
- Unhealthy behaviour and lifestyles which predispose employees to chronic diseases
- Although tuberculosis rates have declined, it remains one of our top five health risks

## WHY SAFETY AND HEALTH ARE MATERIAL TO HARMONY

### Relevant material issues:

- Keeping our people safe and healthy
- Protecting our licence to operate

At Harmony, the safety and health of our employees and contractors is not only a moral imperative but essential for creating a sustainable, responsible business. Safety, one of our five values, is a key priority. Without a safe and healthy workforce, we cannot be productive and profitable. We aim to eliminate and prevent all fatalities and work-related injuries and illnesses by promoting a culture that gives priority to health and safety.

### LINKS TO RISK



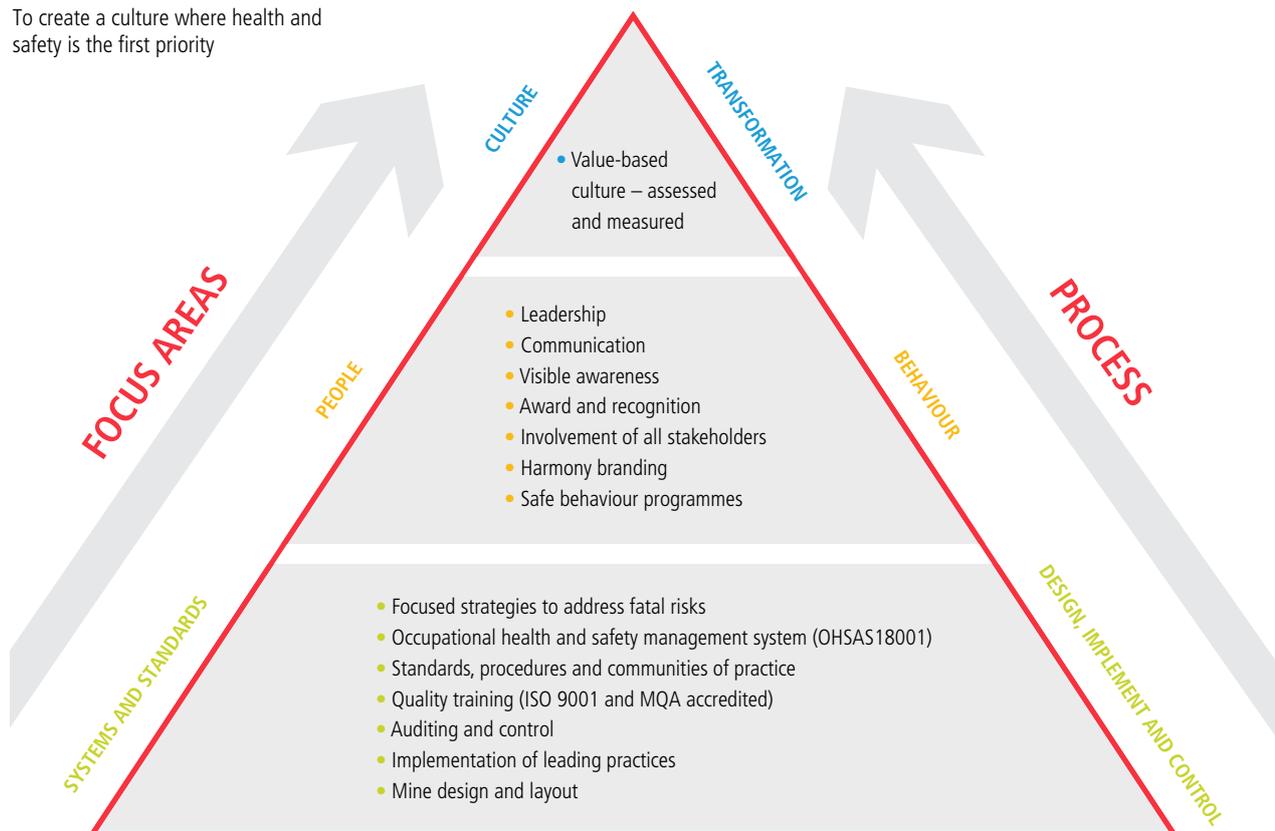
## OUR APPROACH

Both our occupational health and safety policy and our health and safety management framework are aligned with the Mine Health and Safety Act in South Africa and mine health and safety legislation in Papua New Guinea. Representatives from all levels of management, union and government are encouraged to participate actively in our health and safety framework. The relevant strategy is guided by our health and safety policy.

Health and safety committees are in place at all our operations to ensure the active participation of all employees in safety management. Safety and health are also agenda items at all union and management engagements. There are currently 34 full-time

## OUR HEALTH AND SAFETY STRATEGY MODEL

To create a culture where health and safety is the first priority



health and safety stewards at our South African operations (FY14: 42). The decrease in number can be attributed to the closure of Target 3 and the downscaling of the workforce at several operations following the revision of production plans aimed at restoring these operations to profitability. Our operations have a sufficient number of full-time stewards to deal appropriately with health and safety concerns. The technical committee, on behalf of the board, is responsible for approving and monitoring compliance with our safety and health policy. The social and ethics committee oversees public safety on behalf of the board. Quarterly reports on health and safety are provided to these board committees.

Safety performance, a key performance indicator for management, is monitored to determine remuneration in terms of the safety-related bonuses to be paid.

## SAFETY

### SAFETY STRATEGY – SOUTH AFRICA AND PAPUA NEW GUINEA

We aspire to zero harm. To achieve this goal, continuous improvement in our safety performance is required. At Harmony, we have a co-operative approach to safety to ensure that the necessary infrastructure and systems are in place; from planning to communication and training. While management holds legal responsibility for safety, in reality it is up to management and employees to take joint responsibility for their actions, to stop work when they believe that a workplace is unsafe and/or to prevent others from acting in an unsafe manner. Continual reinforcement of safe behaviour in the workplace is overseen by line managers and supervisors. Operations have introduced site-specific safe behaviour initiatives as well as behaviour re-enforcement programmes.

The safety strategy can be divided into three categories – short term, medium term and long term.

The **short-term strategy** comprises visible felt leadership, communication and report reviews:

- **Visible felt leadership**

Leadership is expected to conduct at least two underground/workplace visits per week, including irregular (shifts outside normal working hours) shifts. Visits to high-risk workplaces are prioritised, while training and coaching are guiding principles during the visits.

- **Communication**

Safety is a standard agenda item at all meetings throughout the company. Improved safety awareness through pro-active communication at weekly team leader workgroups meetings with the general manager at each mine; the on-going broadcast of safety messages on mine televisions that are placed throughout our operations (surface and underground); and weekly

# SAFETY AND HEALTH CONTINUED

communication meetings between the general manager and safety representatives. Each general manager also attends monthly safety mass meetings at their operation.

- **Report reviews**

Weekly reports on the top five safety risks are made to the general manager of each operation. These reports are reviewed with the relevant supervisors and actions are shared with the mining teams. General managers also review repetitive A-hazards reported during the week. An A-hazard is anything that has the potential to cause harm. If an A-hazard is noticed, it requires immediate remedial action – stop, fix or barricade. Exception reports from the various services departments on A-hazards are submitted daily to all general managers for action.

The senior management team conducts monthly, formal safety reviews to assess all major safety risks at the South African operations. Each operation provides information on the relevant controls introduced and action plans to address risks identified to ensure lessons learned are implemented throughout the company.

Part of the short-term safety strategy was the implementation of phase two of the electronic safety management system (Pivot). This system makes safety analyses and trends more readily available to the organisation, enabling more informed decision making and quicker, more pro-active responses to exposures and risks.

The **medium-term strategy** involves the implementation of the fatal risk management system. Eight fatal risks have been identified and for which fatal risk standards with measurable critical controls have been drawn up. These fatal risk standards cover areas of fall of ground, underground tramming, electricity, working at heights, winches, mud-rush and inundation, fire prevention and explosives. The standards have been finalised and signed off by the operational committee at the end of July 2015. The process to roll these standards out across the company commenced in August 2015.

The **long-term strategy** focuses on industry leading practices, namely:

- Separating the employee from the risk or hazard through more extensive barrier controls
- Focusing on embedding a safety-conscious culture
- Ensuring that people are committed to our values
- Sharing of information and the adoption of best proven pro-active safety measures

Safety performance at our Papua New Guinea operations is monitored by Harmony's south east Asia team. Safety managers at the Papua New Guinea operations report to Harmony's south east Asia executive committee through regular notifications and formal monthly reports. This committee in turn reports to the technical committee and the board.

## SAFETY PERFORMANCE

### Relevant Global Reporting Initiative indicators: G4-LA5, G4-LA6 and G4-LA8

Regrettably there were eight fatalities during the year at our South African operations (FY14: 22) and one fatality at our Papua New Guinea operations (FY14: 0).

### In memoriam

Date	Operation	Name	Occupation	Cause
29 Jul 2014	Doornkop	Mhanjelwa Cebani	Driller	Gravity related fall of ground
25 Aug 2014	Tshepong	Mmaneo Florisa Muso	Tramming crew supervisor	Trucks, tramming and transport
6 Dec 2014	Hidden Valley	Maxwell Wari	Fitter and turner	Trucks, tramming and transport
13 Jan 2015	Kusasaletu	Mosoeu Ntsutheleng	Team leader	Gravity related fall of ground
18 Jan 2015	Masimong	Michael Chobeng	Team leader	Trucks, tramming and transport
4 Apr 2015	Unisel	Bernardo Ernesto Cuambe	Engineering Assistant	Caught in headgear sheave wheel
30 May 2015	Bambanani	Mariselunes Thibello	Driller	Gravity related fall of ground
14 Jun 2015	Brand 1A Ventilation Shaft) (closed shaft)	1. Sello Jacob Bobejaan 2. Thapelo Andries Mofokeng	Security officers	Overcome by carbon monoxide

## SAFETY IN ACTION

Harmony prioritises safety and has a number of measures in place to ensure that safety remains a priority at all levels of the company:

- Management spends a great deal of time in the workplace coaching employees on ways to work safely. These conversations are shaped by messages agreed by management in consultation with the unions
- External safety initiatives or leading practices are reviewed and implemented. 'Champions' have been nominated for each aspect of leading practice for mining industry occupational safety and health leading practice. Each champion must attend all industry meetings and ensure that all relevant information is disseminated to the operations
- Comprehensive safety reporting allows us to track incidents, measure safety performance and report back to mines on performance. An electronic safety management system (Pivot) is used for this purpose as mentioned under the short-term safety strategy
- Safety roles and accountabilities are clearly defined in job descriptions and used to measure the performance of teams. This ensures that every person at Harmony understands how they can work safely
- Risk assessments are performed before any work is done and a change management procedure is being aggressively implemented
- Mining and engineering committees have been established to ensure that company standards on various mining and engineering work are being drawn up, approved and distributed to operations.

### Fatalities

	FY15	FY14	FY13	FY12	FY11
South Africa	8	22	9	10	15
Papua New Guinea	1	–	–	–	1
<b>Group total</b>	<b>9</b>	22	9	10	16

In line with our values and policies, Harmony provides the family of the deceased with counselling and financial assistance. A fund was established in FY14 to support the educational needs of the school-going dependents of all Harmony employees and contractors who lose their lives in the workplace.

The fatal injury frequency rate for our South African operations decreased by 61% to 0.11 per million hours worked (FY14: 0.28). The fatal injury frequency rate for the Papua New Guinea operations for the year was 0.22 (FY14: 0.00) per million hours worked. The lost-time injury frequency rate for the South African operations was 9.57 per million hours worked (FY14: 8.09), a deterioration of 18%, mainly as a result of the Kusasaletu fire incident where 152 people were classified as lost time injuries, while that for the Papua New Guinea operations was 3.79 (FY14: 0.00). In all, 24 514 shifts were lost due to occupational injury in South Africa (FY14: 25 338) and 24 in Papua New Guinea (FY14: 0).

### Fatal injury frequency rate (per million hours worked)

	FY15	FY14	FY13	FY12	FY11
South Africa	0.11	0.28	0.11	0.12	0.18
Papua New Guinea	0.22	0.00	0.00	0.00	0.22
<b>Group total</b>	<b>0.11</b>	0.26	0.10	0.11	0.18

### Lost-time injury frequency rate (per million hours worked)

	FY15	FY14	FY13	FY12	FY11
South Africa	9.57	8.09	6.03	7.54	8.67
Papua New Guinea	3.79	0.00	0.12	0.45	0.45
<b>Group total</b>	<b>9.24</b>	7.54	5.46	6.86	8.25

Shaft management meets weekly to discuss and document operational and business risks. Remedial action plans are then drafted to mitigate the risks identified.

# SAFETY AND HEALTH CONTINUED

## Pivot safety management system

The training, roll-out and implementation of the Pivot safety management system (Safety phase 2 – group 1) has been completed. Harmony trained 1 050 users for this phase and the system is actively being used. A super-user workgroup, which consists of a specialised user per operation, has been established to assist all operations with support.

The next phase of the project (group 2) commenced on 19 January 2015. Group 2 consists of the remainder of the occupational health and safety management system modules that were not implemented in group 1. Below is a summary of the modules to be implemented:

- Management and administration (module 1)
- Procedures, code of practice, managerial instructions (module 3)
- Occupational health and safety training (module 4)
- Personal protective equipment (module 5)
- Purchasing and contractor management (module 6)
- Communication (module 7)
- Emergency preparedness (module 8)

The project team is currently busy with the Group 2 requirement analysis. The project is expected to be completed by the end of October 2015.

The Pivot safety management system is a tool which enables all operations to identify risks on a daily basis through various disciplines. Once these deviations have been captured, the system identifies and highlights hotspot working places through a risk ranking system which enables management to focus immediately on the correct areas. This entails that certain reports will be escalated to a higher level, depending on the risk ranking. The actions manager module ensures that all deviations are assigned to a responsible person for corrective action and follow up.

The system will also ensure effective data analysis and remedial action implementation. The currently implemented Pivot safety management system provides functionality to capture the following at each Harmony operation:

- Baseline risk assessments
- Issue based risk assessments
- Critical task assessments
- Continuous risk assessments:
  - Inspections
  - Audits
  - Task observations
  - Shift boss and engineering foreman logbooks (we are awaiting approval from the Department of Mineral Resources in the Free State for the use of the electronic format logbooks)
- Accident and incident reporting and investigation

Expectra, an external company, has been contracted to review, revise and re-implement the existing occupational health and safety management system.

## SOUTH AFRICA

The number of Section 54/55 instructions increased to 229 (FY14: 204), mainly as a result of the continuous and increased focus on the South African mining industry by the Department of Mineral Resources. Except for the operations where fatalities and major incidents occurred, no operation was completely stopped as a result of these audits. All other instructions were issued to rectify deviations from mine standards and affected specific sections of the relevant operation.

The total amount of production lost during FY15 which directly relate to section 54/55 instructions is 588 kilograms (18 904 ounces).

Year on year, the fall-of-ground injury frequency rate improved by 18% to 1.26 (FY14: 1.53). There were three gravity related fall-of-ground fatalities in FY15.

### Fall-of-ground injury frequency rate

Per million hours worked	FY15	FY14	FY13	FY12	FY11
<b>South Africa</b>	<b>1.26</b>	1.53	1.29	2.22	1.90

Several safety achievements were recorded during the year. The most significant achievements were as follows:

Operation	Achievement
Bambanani	6 million rail-bound equipment fatality-free shifts
Phakisa	5 million rail-bound equipment fatality-free shifts
Joel	4 million rail-bound equipment fatality-free shifts
Kusasaletu	4 million fall-of-ground fatality-free shifts
Free State surface operations	3.25 million fatality-free shifts
Kusasaletu	3 million rail-bound equipment fatality-free shifts
South African operations	3 million fatality-free shifts
South Africa – metallurgy	2.5 million fatality-free shifts
Hidden Valley	2.5 million fatality-free shifts
Target 1	2 million fall-of-ground fatality-free shifts
Target 1	2 million fatality-free shifts
Harmony One Plant	1.5 million fatality-free shifts
Phakisa	1 million fall-of-ground fatality-free shifts
Tshepong	1 million fall-of-ground fatality-free shifts
Unisel	1 million fatality-free shifts
Kusasaletu	1 million fatality-free shifts
Phakisa	1 million fatality-free shifts
Masimong	1 million rail-bound equipment fatality-free shifts
Doornkop	1 million rail-bound equipment fatality-free shifts

### PAPUA NEW GUINEA

During the year the joint venture steering committee approved the implementation of the International Council on Mining and Metals guidelines to safety reporting. The International Council on Mining and Metals safety reporting standards are well aligned with Harmony's reporting standards in South Africa and reporting in accordance with the International Council on Mining and Metals standard will commence in FY16.

The Papua New Guinea operations recorded one fatal accident and 17 lost-time injuries during FY15. The fatal accident occurred when a wheel-loader operator reversed into the access road at the Hidden Valley process plant.

During FY15, the sling load (helicopter) procedures and standards were reviewed and amended after construction material fell out of the sling net while in transit.

During the year there were several near-miss incidents that are of major concern. The mountainous terrain, high rainfall and quickly changing weather conditions in Papua New Guinea which contribute to landslides and/or slope failures make aviation and vehicle use much riskier activities.

Vehicle use in Papua New Guinea remains an extremely high-risk activity both on-site, which is within our control, and off-site, on public roads, where contractors and employees come into contact with the public and their vehicles and where we have less

# SAFETY AND HEALTH CONTINUED

control. While we may have limited or no control over the natural environmental factors that contribute to the risk involved in operating vehicles, we do have some measure of control over driver skills and competency, ie the ability of the driver to adapt behaviour to changing conditions, and the enforcement of standards and procedures, which can exacerbate or lessen the risk in operating a vehicle.

There were several near-miss vehicle incidents during the year and several resulted in minor injuries. Further work undertaken during the year to mitigate the risk of vehicle-related incidents included:

- revising the specifications of logistics trucks used on the Hidden Valley mine access road by limiting this to 6x6 trucks only
- ensuring qualified driving trainers are supplied by the contractor
- declaring mandatory stops for all trucks prior to the hazardous inclines on the Hidden Valley mine access road to check trailers, radio communication, escort vehicles, etc.

Natural landslides are a relatively common occurrence in Papua New Guinea and together with potential man-made landslides (slope failures associated with open-pit mining) pose a significant safety risk to our operations in Papua New Guinea. During the year a real-time slope stability radar monitoring system was implemented at Hidden Valley and the eastern wall failure and other smaller failures were well managed throughout the year.

The Chief Inspector of Mines' office however did impose restrictions due to the risk of possible slope failures, to mining operations in one area which affected mining flexibility. Specific geotechnical risk assessments are undertaken for all work sites in Papua New Guinea and associated mitigation plans are updated at least once a year.

## **PUBLIC SAFETY**

In South Africa, the board reviewed the social and ethic committee's responsibility in terms of the Act with regard to the monitoring of safety and in future, the committee will receive quarterly reports from management on public safety. Refer to the social and ethics committee report on page 22.

### **Brand 1 methane explosion incident**

A methane explosion occurred at the Brand 1A ventilation shaft in Welkom, which was being rehabilitated as part of Harmony's extensive rehabilitation programme underway in the Free State.

The accident occurred as a result of the ignition of methane within the explosive range in the shaft barrel when reinforced concrete material was thrown down. Given the presence of flammable gas and methane in particular, Harmony is re-drafting its rehabilitation procedure regarding the filling up of redundant shafts with inert material. Extensive testing for the presence of flammable gas prior to backfilling will be undertaken at all shafts scheduled for rehabilitation.

A special operations centre was set up for the reporting of any damage sustained as a result of this incident; in all 1 122 reports of damage to properties were received. All damage to houses and property reported is being repaired at an estimated cost of R25 million.

A permanent plug was subsequently designed for the Brand 1A shaft to prevent any such explosions in future.

## **SAFETY OBJECTIVES FOR FY16**

Our focus will remain on drastically reducing our fatal accident rate with the ultimate aim of having zero fatalities. We know that safety must be approached holistically. We are aiming for a 38% year on year improvement in the total accident and injury frequency rates at the South African operations. The implementation of the electronic safety management system (Pivot) will assist in the analysis of accident trends as well as workplace risk rankings. Management will maximise the use of the information available to ensure that the necessary attention and action are given to workplaces in need thereof.

Behavioural change remain a challenge and we will continue with our strategy to improve both leadership behaviour and our safety messaging to give effect to a long-term shift in thinking and behaviour in terms of safety.

## HEALTH

### Health strategy

#### Relevant Global Reporting Initiative indicators: G4-LA7 and G4-LA2

##### South Africa

Harmony's proactive health strategy focuses on employee well-being, and improving work attendance and individual capabilities. This strategy aims to prevent illness and/or identify disease early through medical surveillance, active case finding, early detection and treatment as part of an integrated management healthcare system.

Harmony hosted the World Tuberculosis Day on 25 March 2015 at our Doornkop mine in collaboration with the Mine Health and Safety Council. The Department of Mineral Resources and the provincial health department were also represented at the event. Harmony also commemorated World Acquired Immune Deficiency Syndrome Day on 5 December 2014 at Phakisa with the support of the Free State departments of Mineral Resources and of Health.

In the Free State region, Harmony participated in the World Tuberculosis Day celebrations by hosting the Member of the Executive Council for Health at Joel as part of the dialogue with the employees and government representatives. On 6 May 2015, Harmony was invited by South African Business Coalition on Health and Acquired Immune Deficiency Syndrome in the Free State to share best practice in tuberculosis management. We also presented our human immunodeficiency virus in the workplace programme at the International Acquired Immune Deficiency Syndrome Conference 2014 in Melbourne. Our proactive approach to healthcare over the past five years has started delivering the expected benefits. The Harmony healthcare programme provides primary, secondary and tertiary healthcare as well as occupational health services to all employees, through company-managed healthcare facilities and medical aid membership, as well as by means of external healthcare providers.

Medical surveillance is on-going at dedicated centres where 42 570 medical examinations were conducted during the year (FY14: 49 214).

Harmony invested more than R100 million in rolling out and establishing seven health hubs, medical surveillance systems (Pivot), clinical systems as an electronic health record system in line with company electronic data solution strategy, data warehousing, predictive analytics, research and service transformation initiatives. Further focus on people-skills development, transformation and service delivery is expected to have a positive impact on team effectiveness and alignment with the strategy.

Harmony has successfully moved away from the historic mine hospital-centric, health service delivery model which is curative in nature, to a more pro-active, preventative health service delivery model. This decentralised service continues to bring primary care-based services as close as possible to the operations, and is being delivered through seven health hubs and two primary health centres. As a result, Harmony closed the Ernest Oppenheimer Hospital and associated pharmacy in Welkom on 22 December 2014 and no longer operates a hospital. This is in line with National Health Insurance strategy and these health hubs provide integrated, proactive healthcare to employees and contractors, in close proximity to the mine, improving the quality of healthcare available and decreasing the costs of centralised healthcare services.

The benefits of these health hubs include:

- Alignment with proposed national health insurance processes and requirements
- Compliance with the requirements of the Department of Mineral Resources
- Facilitation of individual risk profiling, proactively managed by a significantly enlarged, multi-disciplinary team
- Active disease case-finding
- On-site case management
- Continued surveillance and close monitoring of diseases
- A holistic approach to providing healthcare
- Providing a proactive employee assistance programme
- Improved health insurance cover for most employees, including contractors
- Improved quality assurance through health teams at operations
- A decrease in the fixed costs of healthcare delivery through expensive and under-utilised old mine hospitals
- A decrease in the number of shifts lost per medical visit or time spent at the central medical facilities
- A reduction in the sick absenteeism rate and a 14% reduction in health-related absence since January 2014

# SAFETY AND HEALTH CONTINUED

- A marked decrease in the hospitalisation rate
- A more focused approach to medical disability
- A decrease of 10% in the rate of medical mortality
- An increase in human immunodeficiency virus counselling and testing offering from 49% to 70%
- Increase – from 39% to 60% – in the number of employees knowing their status

The lag in the certification process of occupational lung diseases by the Medical Bureau of Occupational Diseases remains a major challenge in the mining industry and for the Department of Health. However, the mining industry is collaborating with the department to find a sustainable solution. The tuberculosis incidence rate in South Africa and Harmony remains alarmingly high compared with the World Health Organisation benchmark, though the trend at Harmony is moving in the right direction. Motivating employees to confirm their status, despite perceived stigma and confidentiality issues, remains one of the biggest challenges and is one that we are tackling head on.

In FY15, we set a new target for health-related absence to include sick absenteeism. A new healthcare focus area was introduced – an initiative to ensure 28% more people are fit for work at the operations. This initiative revisited the reasons for absence from work and a new definition of sick absenteeism has now been established; it has been broadened and re-defined to include all health-related absence from work. This revised definition now includes mine-accident sick leave, mine-accident hospitalisation, permanent disability, occupational health assessments, and screening to determine heat tolerance. The initiative to profile individual health risks will incorporate all of these risk factors as critical elements for future productivity initiatives.

A very successful “At-work” management programme was introduced at the health hubs in collaboration with other service departments, such as human resources. For the past year more than 8 500 individual medical cases were reviewed by a team of healthcare professionals. The aim of this programme is to early-identify potentially chronically ill employees, to review and monitor their medical condition closely to ensure their early return to work as healthy, productive employees.

The health-related absence from work (14% reduction from January 2015 and 9.5% reduction year on year), indicates overall success at operations, if the full health-related absence set of reasons is analysed and managed at individual operations.

## PAPUA NEW GUINEA

In Papua New Guinea, the provision of full-time primary healthcare and occupational health surveillance to employees, dependants and the local community is provided by medical centres at Hidden Valley, Wafi and Wau. The Wau centre is only available to dependants and community members for emergencies, while four community health facilities provide services at Babuaf (near Wafi) and Nauti, Kwembu and Winima (near Hidden Valley).

Upper respiratory tract infections remain one of Harmony’s main medical issues in Papua New Guinea with nearly 2 719 presentations to the medical centres. An integrated business information system provides administrative functions for health, safety, risk management and human resources. Medical registers are used to track and review each patient’s progress from the first visit through to the final treatment.

A total of 13 715 health examinations took place at the Morobe Mining Joint Ventures’ medical centres during FY15 (FY14: 15 726), of which 3 467 (FY14: 3 584) were random drug and alcohol tests.

## HEALTH PERFORMANCE

### Healthcare delivery

In South Africa, membership of a medical scheme is compulsory for all Category 9(+) employees and is voluntary for Category 4 – 8 employees. Approximately 6 770 employees participated in medical schemes in FY15 (FY14: 6 400), with Harmony subsidising these costs by an amount of R11 million per month (FY14: R10 million per month).

In all, 21 780 Category 4 – 8 employees have so far elected not to join a medical scheme. Instead they receive comprehensive health services from mine medical facilities and associated preferred providers at no cost to this category of employee.

Harmony undertakes active case-finding and screening for employees as well as active disease management in respect of chronic conditions who are not members of a medical scheme. Approximately 8 600 (FY14: 10 202) employees are on chronic medication, with one third of these employees being treated for two or more chronic conditions. Chronic conditions include hypertension, human immunodeficiency virus or acquired immunodeficiency syndrome, diabetes, asthma and tuberculosis.

## Tuberculosis

Tuberculosis is recognised as one of the most pressing health concerns in South Africa and the gold mining industry. Harmony's tuberculosis control programme is in line with the relevant guidelines and prescriptions of the World Health Organisation. It is also in line with the national tuberculosis strategic plan in South Africa, which is focused on an integrated approach to addressing human immunodeficiency virus or acquired immunodeficiency syndrome, tuberculosis and sexually transmitted diseases, and with the Mining Charter which covers silicosis as part of the human immunodeficiency virus or acquired immunodeficiency syndrome and tuberculosis programme in its management approach.

Harmony's tuberculosis programme focuses on early case findings, directly observed therapy short-course, chemotherapy, radiological tuberculosis screening and hospitalisation until sputum conversion. In addition, various measures are implemented over and above the national tuberculosis strategic plan, such as identifying early tuberculosis resistance through specialised generic and biochemical tests and analysis, and investigative diagnostic tests for early detection.

A total of 1 140 (FY14: 1 022) ultraviolet lights for infection control have been installed in areas of high risk for tuberculosis infection, including the newly-established health hubs. Ultraviolet lights sterilise the air and reduce the risks of inhaling micro-organisms, including the tuberculosis germ called mycobacterium tuberculosis that is spread from person to person through the air. Employees exposed to dusty work environments are screened annually by means of a chest X-ray in order to detect tuberculosis infection.

Continuous monitoring and education are conducted at the health hubs which oversee major campaigns as per the national health calendar. The completion of an annual individual tuberculosis questionnaire has become standard practice in recent years.

Among employees, a total of 288 cases of tuberculosis were certified (FY14: 353) in South Africa. This figure includes contractors, who have also been included in the full tuberculosis programme since 1 August 2013 so as to proactively contain and prevent any further spread of tuberculosis, and to achieve a higher cure rate and lower tuberculosis incidence rate.

There has been a significant decrease in the number of new tuberculosis cases since the inception of the proactive healthcare strategy in FY10. This downward trend is depicted below:

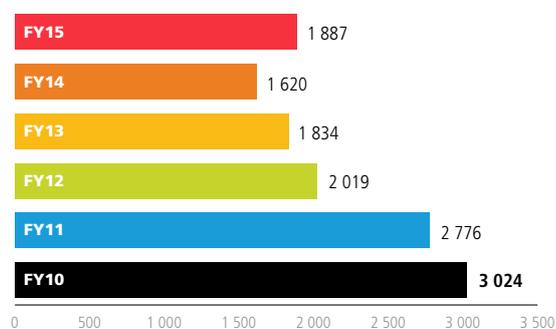
### Cases of tuberculosis

	FY15	FY14	FY13*	FY12*	FY11*
<b>South Africa</b>					
Certified	<b>288</b>	353	629	568	973
New cases	<b>621</b>	568	678	906	1 201

\* Evander has been excluded from the FY11 – FY13 figures for comparison

### Tuberculosis incidence

100 000



Three (FY14: one) new tuberculosis cases were reported during the year in Papua New Guinea. During the year, Hard Hat Health (on behalf of the joint ventures) had consultations with other companies operating in Papua New Guinea to ensure their learnings with regards to tuberculosis management in Papua New Guinea can be incorporated into the tuberculosis management plan. (Refer to page 74 for more detail).

## SAFETY AND HEALTH CONTINUED

Multidrug-resistant tuberculosis remains of increasing concern to the gold industry and South African population; treatments are expensive and protracted as employees affected are unlikely to return to work. Multidrug-resistant tuberculosis can be identified by sophisticated technology at multidrug-resistant tuberculosis hospitals. Given multidrug-resistant tuberculosis's close association with human immunodeficiency virus, Harmony has developed a human immunodeficiency virus and tuberculosis treatment which will be integrated into the company's healthcare management programme.

A total of 23 new cases of multidrug-resistant tuberculosis were diagnosed in FY15 (FY14: 25) and 21 employees are currently on multidrug-resistant tuberculosis treatment (FY14: 29). Employees who are on multidrug-resistant tuberculosis treatment are removed from all risk-work (dusty environment) as a preventative measure.

### HUMAN IMMUNODEFICIENCY VIRUS OR ACQUIRED IMMUNODEFICIENCY SYNDROME

The human immunodeficiency virus or acquired immunodeficiency syndrome pandemic in South Africa continues to have a significant impact on employees, their dependants, as well as local and labour-sending communities. This illness, caused by human immunodeficiency virus or acquired immunodeficiency syndrome, can result in higher levels of co-infections of other diseases, increased absenteeism and reduced performance levels, loss of skills, increased economic burden, and sometimes death.

At the South African operations, human immunodeficiency virus prevalence, as per our actuarial model, is estimated at 27% of the labour force (FY14: 22%). Harmony manages human immunodeficiency virus or acquired immunodeficiency syndrome through its clinics, human immunodeficiency virus or acquired immunodeficiency syndrome committees and healthcare specialists. Our human immunodeficiency virus or acquired immunodeficiency syndrome strategy is based on promoting health through education and awareness programmes, preventative strategies to reduce the number of new cases, evidence-based curative interventions to ensure treatment, and on-going monitoring of compliance.

During the year, 4 016 employees were registered on the antiretroviral therapy programme (FY14: 4 640) at an average monthly cost of R515 per person (FY14: R549). Harmony encourages all human immunodeficiency virus-positive employees to participate in the wellness programme, which includes counselling, treatment of infections and antiretroviral therapy, to which all employees have access.

In Papua New Guinea, the Hidden Valley joint venture, with the assistance of Hard Hat Health, acquired a digital x-ray machine and set up a medical laboratory with equipment to enable the accurate testing of malaria, tuberculosis, human immunodeficiency virus or acquired immunodeficiency syndrome, etc. Staff members were trained to operate the equipment and the clinic was also registered with Papua New Guinea medical council to enable two nurses to commence voluntary counselling and testing for human immunodeficiency virus or acquired immunodeficiency syndrome.



Carletonville – Silicosis First Stop Centre

## Voluntary counselling and testing for human immunodeficiency virus or acquired immunodeficiency syndrome

Pre-counselling and voluntary counselling and testing are offered to all employees through on-going interventions at all Harmony healthcare centres. A total of 19 234 (FY14: 33 531) employees received voluntary counselling and testing during the year and of these, 14 933 (FY14: 14 060) employees confirmed their status. Although fewer employees were counselled this year, more employees agreed to be tested – 79% in FY15 compared with 42% in FY14.

### Number of employees tested per mine

Mines	FY15	FY14	FY13	FY12	FY11
Target 1	1 025	1 475	1 842	3 575	1 841
Tshepong	3 164	4 609	2 103	964	1 310
Masimong	2 935	6 906	853	574	1 016
Bambanani	1 148	1 436	589	1 722	911
Unisel	776	920	317	662	1 015
Joel	2 022	4 656	806	601	443
Phakisa	1 337	1 319	2 893	2 063	1 302
Doornkop	3 356	3 318	2 531	1 101	808
Kusasaletu	3 053	1 605	2 916	2 265	546
Kalgold	573	427	231	111	97
Other*	1 183	6 860	2 768	4 445	3 759

\* Other – includes contractors, service departments and shafts that closed or were sold

## Preventative healthcare

**Health promotions and education:** Harmony carries out monthly awareness campaigns on various health-related topics such as reducing the human immunodeficiency virus infection rate to zero, voluntary counselling and testing, the human immune system, means of infection with a focus on unsafe sex, taking care of your body through a healthy diet and lifestyle, the risk factors associated with diabetes and the warning signs of chronic diseases.

### Positive behaviour reward programme

In the second quarter of FY15, the health services team piloted an innovative positive behaviour programme to reward outstanding health behaviour and sustain testing for human immunodeficiency virus or acquired immunodeficiency syndrome as a new culture in Harmony. Employees were offered cell phone airtime to encourage testing for human immunodeficiency virus or acquired immunodeficiency syndrome. As a result, 87% of employees who were counselled agreed to be tested, compared to 56% in FY14 in the same quarter. This initiative led to a second phase of this programme which commenced at the end of May 2015, resulting in an additional 700 employees confirming their human immunodeficiency virus status for the first time in Harmony.

The positive behaviour programme has led to the identification of more than 400 new human immunodeficiency virus cases which have been enrolled as part of our wellness programme.

**Influenza vaccines:** A total of 5 286 (FY14: 5 563) employees consented to receive influenza vaccinations during the year. The year on year decline is attributable to the late arrival of 2015 vaccine in South Africa. This initiative is seen as a proactive measure to prevent employees from falling ill during the winter season. Employees who received the influenza vaccines will be monitored in terms of sick absenteeism to measure the effectiveness of this intervention.

## OCCUPATIONAL DISEASES

### Silicosis

Silicosis is caused by long-term exposure to high levels of quartz silica dust and can cause increased susceptibility to tuberculosis. Silicosis in South Africa, and at Harmony, remains a material concern. The integrated Harmony human immunodeficiency virus or acquired immunodeficiency syndrome, tuberculosis and silicosis policy and programme were developed to manage the debilitating disease responsibly so as to minimise the risk and to proactively prevent further deterioration. The trend for silicosis indicates a decline in incidence.

## SAFETY AND HEALTH CONTINUED

During FY15, 313 cases of silicosis were reported to the Medical Bureau of Occupational Diseases and, of these, 197 cases were certified (FY14: reported 437, certified 175).

Harmony is a member of the Chamber of Mines and is participating in processes to address issues relating to historical silicosis cases. The legal action against the gold mining companies is in an early stage and it is too soon to estimate the extent of any possible claims.

The silicosis working group (initiated by the South African gold mining companies who are members of the Chamber of Mines) continues to search for a sustainable, inclusive and comprehensive solution for current and legacy dilemmas. Meetings with stakeholders continued during the year.

Some of the activities included:

- The immediate operational focus on input and support of the Medical Bureau of Occupational Diseases where a lack of resources and management skills prevents the certification and compensation of current silicosis patients
- Participation in the 2015 Science conference organised by the National Department of Health with the aim of finding sustainable solutions to the current dysfunctional situation, and working towards an ultimate solution
- On-going support for the Medical Bureau of Occupational Diseases, in association with the Chamber of Mines, with data analysis and actuarial support. Assessment of the first 100 000 cases was concluded, and data for 700 000 pending files captured at the Medical Bureau of Occupational Diseases
- Provision of operational support to the Carletonville and Mthatha one-stop service centres of the Medical Bureau of Occupational Diseases where ex-miners can do their biannual benefit examinations and submission of claims
- Launch of a multi-stakeholder engagement initiative by the working group involving the departments of Health, Labour and Mineral Resources together with representatives from neighbouring countries. Other stakeholders include the unions, other mines, attorneys representing claimants in the class action, as well as ex-miners' organisations

Project Ku-Riha (the Tsonga word for "compensation") was launched on 29 May 2015 and is being rolled out by the Department of Health, with the goal of making substantial inroads into addressing the backlog of compensation claims from mineworkers who suffered occupational lung diseases while working in the mining sector, and ensuring that new valid claims are paid within a reasonable timeframe. Harmony and seven other South African mining companies are participating in the initiative.

The companies see this project as being fundamental to their broader initiative announced on 18 November 2014 to address issues relating to compensation and medical care for occupational lung disease in the South African gold mining industry. The companies are engaging a range of stakeholders in a quest to design and implement a comprehensive solution that is both fair to past, present and future gold mining employees, and that is also sustainable for the sector.

Project Ku-Riha marks a turnaround in the administration and operation of the compensation fund on which mine workers who have contracted occupational diseases depend. All parties recognise that the compensation system has not been operating as effectively as it should, with significant backlogs in claims processing having built up over the years.

For the companies, an efficiently operating compensation system is a critical part to the comprehensive solution being sought. This project builds on work already done between the Department of Health and the Chamber of Mines that led to the establishment of the first two one-stop service centres in Carletonville and Mthatha.

These centres offer medical examinations, rehabilitation assessments, health promotion and counselling to all patients, as well as referrals to other medical specialists if necessary. Patients can now be diagnosed, treated and receive the help they need to stay healthy, in one place. In addition, the centres help individuals prepare and submit compensation claims to the Medical Bureau for Occupational Diseases.

The eight mining companies have jointly committed to a R5 million funding programme for Project Ku-Riha which has enabled the Medical Bureau for Occupational Diseases and the Compensation Commissioner for Occupational Diseases to employ a project manager and an additional 18 financial and government administration graduate professionals to carry out the necessary work.

Among other things, the work of Project Ku-Riha includes:

- Data capturing and verification: confirming the contents of the files and capturing the most important information in each on an electronic database. Accurate data is critical for the claim to be processed and compensated

- Dealing with certification backlogs
- Project management
- Financial assistance to the Carletonville one-stop service centre

### Dust control

In order to decrease our employees' exposure to silica dust, Harmony uses a range of engineering controls to minimise dust. Mining Industry Occupational Safety and Health (MOSH) leading practices such as the fogger system at strategic underground areas and the implementation of foot- and side-wall treatment in identified intake airways to allay dust have been adopted.

In addition, multi-stage dust filtration systems have been installed. We are also in the process of installing winch covers for all of our winches. Progress on winch cover installation is 86.7% with a total of 946 units out of the 1 091 units having been fitted. Action plans with completion dates have been drawn up by each of the operations, indicating the number of winches on site, the number fitted with covers, the number outstanding still to be fitted with covers and by when. It is envisaged that all winches will have covers by the end of the second quarter of FY16. It is now standard practice that all new winches purchased must be fitted with dust covers.

The silica quartz content of dust is highly variable; this can pose a challenge when measuring the effectiveness of the engineering controls. Harmony therefore concentrates on controlling the total respirable dust load in order to reduce the amount of exposure to silica quartz. Training and awareness programmes address the concerns of dust control in stoping workplaces and all development ends are equipped with water blasts to settle dust directly after a blast.

Dust discharge occurs during activities where the rock is broken at source i.e. stoping, development and trackless mining. Engineering controls focused on dust allaying at source are investigated through the Mining Industry Occupational Safety and Health dust task team. A prototype waterblast which can be used in both stoping and development is currently being tested on a few mines.

The following measures were implemented at our operations during the year to combat silicosis:

- Revision of the airborne pollutant baselines to identify hotspots and to assess the effectiveness of engineering controls is in progress at all operations of which 91% (FY14: 67%) of total samples have been completed. All Harmony operations are utilising the portable spot dose rate meter PDR 1500 measurement instruments to identify high dust load areas. Evaluation of suitable/improved respirators has been completed, of which five different units meet the South African National Standards homologation standard for men. Currently three units meet the standard for women
- All Harmony operations are members of the Community of Practice for Adoption forum to monitor the progress of Mining Industry Occupational Safety and Health initiatives

### Industry milestone: elimination of silicosis

By December 2024, 95% of all exposure measurement results will be below the milestone level for respirable crystalline silica of 0.05 mg/m<sup>3</sup> (these results are individual readings and not average results).

Using present diagnostic techniques, no new cases of silicosis will occur amongst previously unexposed individuals ("previously unexposed individuals" are those unexposed to mining dust prior to December 2008 i.e. equivalent to a new person who entered the industry in 2009)

Workshops have been conducted by the occupational hygienists from all the operations to establish a strategy to achieve this milestone. The various options will be discussed early in the new financial year by senior management.

In Papua New Guinea, we experience around 3-4 metres of rain a year, which is a good dust suppression measure. Additional dust suppression methods are used in the open pits and at the crushers and conveyors. Papua New Guinea also has a low respirable silica risk. The combination of these factors means that dust is generally well-controlled at our Papua New Guinea operations.

### Noise-induced hearing loss

Harmony embarked on an Oto-Acoustic-Emissions initiative as a measure for the detection of early hearing loss. The Council for Scientific and Industrial Research has collaborated and analysed the data and confirmed that Oto-Acoustic-Emissions detect damage two years earlier than an audiogram. We have received a proposal from the researchers at the University of Pretoria to continue with further technical developments that could help prevent noise-induced hearing loss and also to develop leading indicators for the industry.

# SAFETY AND HEALTH CONTINUED

All Harmony employees who are exposed to high noise levels are issued with personalised hearing protection devices, which reduce noise levels by 25 decibels.

During the year, 98.9% of occupationally exposed employees, including contractor employees (59.6%), were issued with personalised hearing protection devices (FY14: 93.8% and 62%), with a progressive total of 21 921 personalised devices issued in FY15 (FY14: 27 238). Sound attenuators were also fitted to all equipment, resulting in no noise level exceeding 110 dB(A)-weighted decibels from any machine, in compliance with our noise milestone.

The number of early noise-induced hearing loss cases (5 to 10% shift) decreased by 1 204 cases to 526 in FY15.

New industry milestones for the elimination of noise-induced hearing loss were introduced by the Mine Health and Safety Council which took effect 1 January 2015.

#### **New industry milestones:**

- By December 2016, no employee's standard threshold shift (STS) will exceed 25dB from the baseline when averaged at 2 000Hz, 3 000Hz and 4 000Hz in one or both ears
- By December 2024, the total operational or process noise emitted by any equipment must not exceed a milestone sound pressure level of 107 dB(A).

Although Harmony has a 'buy quiet' policy in place, more engagement with original equipment manufacturers will be required to work towards the milestone.

Audiometric testing during annual medical examinations tests for hearing loss. The early detection of hearing loss is part of Harmony's hearing conservation programme and this is done at least annually at occupational health hubs by an appointed audiometrist.

Harmony has placed increased emphasis on the monitoring of employee compliance regarding the use of personalised hearing protection devices in the workplace. An awareness drive was initiated at all operations by supervisors, assistant occupational hygienists and health and safety representatives to ensure employees are aware of the benefits of wearing personalised hearing protection. A monitoring programme was also implemented to measure actual compliance in the workplace of the use of personalised hearing protection.

Compliance monitoring is done during routine occupational hygiene inspections and an ad hoc audit was conducted by a high-level audit team during the year.

Workshops with employees exposed to noise have been initiated to promote a better understanding of the reasons why people are not wearing noise clippers underground. The benefits of using personalised hearing protection devices are described in the e-learning training material used in employee training courses.

As part of the initiative to prevent noise-induced hearing loss, 22 418 employees participated in the 'hearing coach promotion' initiative during the year. Evaluations were done and guidance provided where necessary regarding the use of customised hearing protection devices.

During the year under review, an audiometric screening/testing system was acquired in Papua New Guinea to ensure that hearing loss can be measured against a baseline.

#### **Heat stress**

Extensive refrigeration and ventilation measures are in place at all operations where temperatures exceed normal working ranges. Heat-tolerance testing and acclimatisation programmes support and protect employees exposed to excessive heat in the workplace. In FY15, 6 736 heat-tolerance tests were undertaken (FY14: 11 163).

Heat-related illness cases decreased from 64 to 23 cases in FY15.

## Radiation protection

All our operations in South Africa comply with the dose limit of 50 millisievert in a year and 100 millisievert in five years. Operational controls have been established to ensure that elevated monitoring results are investigated and corrected where required.

Radiological clearances are conducted at decommissioned sites to ensure the future declassification of these areas.

The National Nuclear Regulator approved the land clearance application submitted for the reduced footprint around Eland Shaft.

## Managing chronic diseases

As part of Harmony's integrated approach to healthcare, specific initiatives have been implemented to manage chronic diseases, with our focus on the human immunodeficiency virus, tuberculosis, diabetes, hypertension and silicosis, as well as asthma and epilepsy. In FY15, 42% of our Category 4 – 8 employees in South Africa received treatment for chronic conditions (FY14: 42%).

Harmony's health initiatives focus on the most common diseases and the e-learning module covers these diseases in the induction programme. Other initiatives that have been used are pamphlets, management healthcare memorandums that focus on mine-based health and safety topics, health-worker training to recognise the most prevalent diseases, screening at all medical centres, disease management interventions and quality assurance. In addition, branding on Harmony buses is used to help educate employees on human immunodeficiency virus matters and promote voluntary counselling and testing, as are podcasts and liquid-crystal display monitors.

## Upper respiratory tract infections

In Papua New Guinea, Hidden Valley is located approximately three kilometres above sea level and most employees reside in the lower, warmer areas; the regular change in altitude contributes to various respiratory ailments, mostly viral infections. Other factors contributing to these infections include air-borne pollen during peak flowering times (thick rain forest and montane forest) which affects air quality. The heavy rainfall all year round maintains high levels of humidity (around 80-90%) which creates favourable conditions for fungus (spores), bacteria and viruses to proliferate.

In Papua New Guinea, a total of 2 719 employees were treated for respiratory ailments in FY15 (FY14: 2 921). There has been a decline in the number of cases of upper respiratory tract infections presented since FY12, with a decrease of 7% recorded for FY15. Harmony has successfully rolled out a programme to educate employees regarding respiratory ailments and gastro-intestinal hygiene.

### Upper respiratory tract infections

	FY15	FY14	FY13	FY12	FY11
Number of employees treated	2 719	2 921	5 083	5 428	4 605

## Malaria

Malaria is endemic to many parts of Papua New Guinea, which includes work sites such as Wafi-Golpu and Lae but excludes Hidden Valley. Importantly, many employees and contractors working at Hidden Valley reside in areas where malaria is endemic, and this is where our community health projects play a vital role in combatting the disease.

Over the past two years, there has been a 70% decrease in the presentation of patients with malaria-like symptoms at the clinics in Papua New Guinea. This is primarily as a result of the following:

- Continued support for provincial programmes to eradicate the disease by the use of residual spraying and fogging
- Standardised testing that allows for more consistent testing for malaria. The turnaround time of blood tests has been increased, meaning that patients are tested twice before receiving treatment, allowing the treatment provided to be appropriate
- The distribution of treated mosquito nets and treatment regimes
- On-going malaria awareness education that is provided to employees, contractors and communities
- As part of the malaria awareness campaign, Morobe Mining Joint Ventures has been issuing treated mosquito nets as standard personal protective equipment to all employees and contractors on site. In addition, work clothes issued at sites like Wafi-Golpu are impregnated with insecticides, and insect repellents are issued to all employees and contractors

# SAFETY AND HEALTH CONTINUED

The Morobe Mining Joint Ventures' malaria programme is now being managed and overseen by the general manager: health and safety.

## Hard Hat Health

During the year, in Papua New Guinea, Morobe Mining Joint Ventures' contract with the International Organisation for Standardisation expired and a new contract with Hard Hat Health became effective. Hard Hat Health, an Australian-owned company based in Sydney, is owned and managed by three senior executives in the medical services industry. Hard Hat Health provides the following services to Morobe Mining Joint Ventures:

- Supply of qualified staff – paramedic at Hidden Valley (1 position)
- Co-ordination of both international and domestic medical evacuations
- Restructuring of the medical staff in the Morobe Explorations, Hidden Valley and Wafi-Golpu joint ventures which will include the updating of job descriptions and the integration of standards and procedures, among others
- Staff training
- Reviewing and updating the clinical governance framework for the joint ventures
- General corporate medical support

Once the emergency protocols and governance structures are updated and embedded within the organisation, the scope of work of the contractor and the joint venture medical staff will change to focus on the pro-active health care management of our employees.

## Hard Hat Health's progress during FY15

Scope element	Status
Supply of qualified staff	Complete
Coordination of medical evacuations	Commenced and on-going
Restructuring of the medical staff which will include updating of job descriptions	Complete
Integration of standards and procedures	Commenced
Staff training	Commenced
24/7 medical support (phone) from a doctor for all serious injuries, repatriations and other issues as per agreed guidelines	Commenced and on-going
Standardisation of medical reporting	Commenced – changes to information management system required
Overseeing regular internal audits	Commenced
Review of emergency equipment on site and recommendation for potential changes	Complete – additional equipment delivered to site
Review of site formulary, inventory, supply line and storage of medications and consumables	Completed
Consultancy on local vector control programmes at sites including specialist entomologist advice and oversight where required	Commenced
Review current policies and procedures for pre-employment, pre-deployment, regular and post-deployment physical assessments	Updated procedures approved
Review malaria programme and provide recommendations or if required formalise an implementation plan	Review commenced

## MANAGEMENT INFORMATION

In collaboration with the Harmony Business Intelligence Team, the healthcare team successfully managed to deposit medical data into the Harmony Data Warehouse. However some of the primary healthcare data remains a challenge. The Harmony Business Intelligence team has developed an internal individual medical risk profile model to assist clinicians in making timeous medical decisions. The model will form the basis for individual treatment plans, and for work management and health risk assessments to aid future decision making regarding health and safety.

## HEALTH OBJECTIVES FOR FY16

Harmony's healthcare strategy is aimed at improving the well-being of every employee. Targets for FY16 include:

- Continued improvements in health-related absenteeism rates, specifically a 28% decline in absenteeism
- Continued improvements in the availability of Pivot data. In the long term, data from sources such as Pivot and clinical data will be combined in an integrated approach that will assist doctors and healthcare workers in making holistic, informed decisions about a person's health
- On-going regulatory and legislative compliance
- Continued standardisation of medical surveillance processes with written procedures
- Launch of a positive behaviour reward system to promote healthy lifestyles among employees



Target 1 – Health Hub



# EMPLOYEES AND COMMUNITIES

## EMPLOYEES

Relevant Global Reporting Initiative indicators: G4-LA1, G4-LA9 and G4-LA12

Achievements	Challenges
<ul style="list-style-type: none"> <li>• We provide jobs in the areas in which we operate:               <ul style="list-style-type: none"> <li><b>South Africa</b> – total number of employees (including contractors) of 31 012 (FY14: 34 686)</li> <li><b>Papua New Guinea</b> – Harmony employees (excluding Morobe Mining Joint Ventures): 102 (FY14: 60)</li> </ul> </li> <li>Achieved our employment equity target in South Africa (historically disadvantaged South Africans in management)               <ul style="list-style-type: none"> <li>• Board: 60% versus 40% target (FY14: 60%)</li> <li>• Executive: 44% versus 40% target (FY14: 50%)</li> <li>• Senior management: 40% vs 40% target (FY14: 49%)</li> <li>• Middle management: 46% versus 40% target (FY14: 41%)</li> <li>• Junior management: 60% versus 40% target (FY14: 46%)</li> <li>• Core skills: 87% versus 40% target (FY14: 75%)</li> </ul> </li> <li>• Leadership training and investment in human resources               <ul style="list-style-type: none"> <li>• hours of employee training and development: 1 757 704 hours (FY14: 2 084 469 hours)</li> <li>• training and development group aggregate: human resources development expenditure at 5% of payroll – in line with the 5% target</li> </ul> </li> <li>• Financial training for employees to date: 10 778 employees have received training on personal indebtedness</li> <li>• In FY15, the number of hostel dwellers sharing accommodation declined from 6 841 (FY14) to zero, with all employees now housed in single rooms</li> <li>• Health hubs close to operations promote pro-active healthcare for our employees</li> <li>• Compliance with Mining Charter               <ul style="list-style-type: none"> <li>• Ownership &gt; 26%</li> <li>• Hostel conversions to single rooms &gt; 100% of target</li> <li>• Procurement                   <ul style="list-style-type: none"> <li>• capital goods 76% vs 40% target</li> <li>• services 70% vs 70% target</li> <li>• consumer goods 66% vs 50%</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Although our restructuring programme involved retrenchments to reduce costs, we also need to ensure that we retain the skills and experience required to operate our mines efficiently</li> </ul> <p>Employee turnover in FY15:</p> <p><b>South Africa:</b> 13.1% (FY14: 11.7%)</p> <p><b>Papua New Guinea:</b> 11.4%(FY14: 33.6%)</p>

## WHY THIS IS MATERIAL TO HARMONY

Employees are our most valuable asset at Harmony – without them we would not be able to operate. Our employees contribute to the growth and development of our company and we, in turn, contribute to the growth and development of our people. Our aim is to provide the means for our employees to achieve a good quality of life for themselves and their families, and to provide the opportunity for each individual to develop to his or her full potential.

### Relevant material issues:

- Maintaining stability in our workforce
- Establishing a committed, dedicated culture of delivery
- Ensuring our workforce is healthy and safe
- Protecting our licence to operate
- Being relevant in the communities in which we operate

At the end of FY15, in South Africa, our employee complement was 31 012 (FY14: 34 686) - 84% permanent employees and 16% contractors. In Papua New Guinea, the staff complement of 102 (FY14: 60) excludes employees of Morobe Mining Joint Ventures. Of these, 74% were permanent employees and 26% were contractors working on specific construction projects (FY14: 98% permanent; 2% contractors). Our recruitment initiatives focus on local communities, with more than 75% (FY14: 76%) of the South African workforce being local, and in Papua New Guinea 96% (FY14: 88%) are local. The slight decrease in the local South African component is due to the restructuring of operations.

Objectives	Progress/ initiatives in FY15
Complete Merriespruit 3 housing project during FY15	Merriespruit 3 housing project was 81% completed by June 2015 Merriespruit 3 provides 448 family units
Maintain healthy relationships with organised labour	Future forums instituted at all operations
Productivity improvement initiatives	Right size operations – have the right people in the right position at the right time
Continuing adult basic education and training programmes and working towards the target of having a fully literate workforce by 2024	572 employees attended these programmes (FY14: 880) We are at 77% literacy levels compared to 72% in FY14
Informed, engaged and empowered workforce	<ul style="list-style-type: none"> <li>• Leadership training</li> <li>• Employee communication strategy</li> </ul>

Given our aim to have motivated and competent employees, our human resources initiatives focus on four underlying goals, namely to:

- Entrench a single organisational culture
- Attract and retain employees with high potential
- Develop employees to address skills shortages and improve efficiency
- Maintain an effective employee performance management system

During FY15, we continued our cultural alignment programme, with 68 management employees completing the related Breakthrough sessions. The programme is aimed at achieving cohesion throughout the company by shaping leadership, and by empowering and engaging employees.

Leadership shaping encourages our senior leadership to set Harmony's cultural direction and to devise ways of achieving it. This includes a well-defined set of values, compiled following the 2011 culture survey, as well as the Harmony leadership brand that is cascaded down from the more senior leaders to those below by means of coaching. This process is assisted by a suite of Breakthrough programmes that enable leaders to drive our preferred company culture through the various layers of Harmony. This step of the programme leads to the next – an empowered leadership team that continually shapes the Harmony culture.

# EMPLOYEES AND COMMUNITIES CONTINUED

Early indications show that those leaders who have embraced and driven a single culture outperform their peers in terms of production and safety. The lower incidence and decreased impact of industrial action also points to a more aligned culture where people are more engaged and are able to contribute.

## EMPLOYEE ENGAGEMENT

The Connect value, in particular, ensures that our employees feel part of the Harmony family. Internal communications is a continuous interactive process. We use multiple platforms, such as regular meetings with the heads of departments, work groups and general manager engagement platforms (mass meetings and quarterly productivity meetings). We also use traditional media such as print (posters, newsletters ('Nuggets'), memos, flyers), digital (mine television, intranet, website, text messages) and social media in the form of Twitter. The chief executive officer also communicates with the workforce by means of e-mails ('Notes from the CEO's desk') and meetings with employees during internal roadshows.

For employees to be committed, productive and conscientious, we believe they should feel valued and therefore we ensure that our employees know their roles, their company and what is happening in the industry:

- they are the first to hear important news
- they are consulted regularly
- they are listened to and we provide them with the opportunity to be heard
- their suggestions are acted upon

## EMPLOYMENT STANDARDS

### Relevant Global Reporting Initiative indicators: G4-LA2

In South Africa, employment policies and practices are governed by the Labour Relations Act 66 of 1995, the Basic Conditions of Employment Act 75 of 1997, the Mine Health and Safety Amendment Act 74 of 2008, Skills Development Act 97 of 1998, the Employment Equity Act, by company and operation-based recognition agreements and by other collective bargaining agreements.

The company provides a wide range of benefits to employees that includes sick, annual and maternity/paternity leave, production and performance-based bonuses, housing and housing allowances, home ownership benefits, funeral fund, medical aid, disability cover as well as provident and pension funds.

Employee relations in Papua New Guinea are regulated by the Employment Act of 1978 and the Employment of Non-Citizens Act 1978. Engagement of Papua New Guinea citizens is guided by a Memorandum of Agreement between the Landowner Association, the company and the government, with preference for employment given to locals.

In Papua New Guinea, efforts to reduce reliance on contractors by the Morobe Mining Joint Ventures and Harmony operations continued in FY15, resulting in further reductions in the contractor workforce by the end of the year under review.

A review of all human resource procedures and policies is on-going, including remuneration and incentive schemes.

## REMUNERATION POLICY

Our remuneration policy is aligned with Harmony's strategic direction, business-specific value drivers and operational results at all levels across the company. (See page 191 for our full remuneration policy).

## EMPLOYEE SHARE OWNERSHIP: SOUTH AFRICA

In FY12, Harmony launched the Tlhakanelo Employee Share Ownership Plan which resulted in all non-managerial employees becoming eligible to be shareholders with a total potential stake of 2.9% in Harmony. Currently, employees through the share plan collectively own 0.24% of Harmony's issued shares. This gives employees the opportunity to share in Harmony's gains and to benefit from their hard work, in line with our values of achievement and connectedness.

In this financial year the Tlhakanelo share plan realised R43 million for employees.

The rules of the scheme are communicated through offer, vesting and allocation letters. In addition, human resource leaders receive frequent training to ensure that they are equipped to address employee queries. We also use mine-based audio-visual facilities to communicate related information. For more details please refer to the remuneration report on page 190.

## LABOUR RELATIONS

### Union leadership empowerment programme

An empowerment programme aimed at sharing the business imperatives and performance, the company strategy and an understanding of business principles was initiated during the year. In all, 61 union representatives attended the programme and positive feedback was received from attendees. The intention is to ensure that our organised labour is fully engaged.

### Restructuring of our South African operations and corporate office

During FY15, Target 3 and the Ernest Oppenheimer Hospital were closed and Kusasalethu, Doornkop and Masimong were restructured. As a result, a total of 1 917 employees were transferred to other operations, 80 took early retirement, 492 accepted voluntary retrenchment packages and 235 were retrenched. In FY15, we also reduced staff at our corporate office in Randfontein – 16 took early retirement, 66 accepted voluntary retrenchment packages and 144 were retrenched.

### South African gold wage negotiations

#### Relevant Global Reporting Initiative indicators: G4-EC5

Harmony negotiates changes to wages and other conditions of employment through recognised collective bargaining structures, including a centralised industry forum under the Chamber of Mines. Negotiations began in June 2015. A three-year wage settlement was reached with the unions representing the majority of employees at Harmony and was extended to all employees in the bargaining unit. For more detail on the wage agreement, please refer to [www.harmony.co.za/investors/news-and-events](http://www.harmony.co.za/investors/news-and-events).

### Labour disputes and strikes

#### Relevant Global Reporting Initiative indicators: MM4, G4-LA16, G4-HR11

Labour disputes and strikes are considered one of our material issues because, in addition to the resulting loss of production, disputes affect morale and reputation, and present a risk to non-striking employees, to communities and to company assets. (See page 50 for full details of our material issues).

To mitigate the risk of labour disputes in South Africa, we constantly engage with organised labour at mine and company level. Human resources adopts a proactive approach in addressing employees' queries.

Harmony has embarked on various initiatives to address the scourge of employee over-indebtedness. These include, among other things, financial literacy training, discontinuation of non-statutory payroll deductions and notifying employees about emolument attachment orders against their pay. In all, 10 778 employees (FY14: 5 593) have attended the financial literacy programme since its launch in September 2013.

Below are some of the key themes gathered from feedback from those who have attended the programme:

- The devastating effect that debt has had on their families' lives
- A desire to be in control of their own spending, and have a life without debt
- Recognition that they do not have power over their spending
- Strong awareness of the need to budget

Other initiatives still being rolled out include the verification of emolument attachment orders by the National Debt Mediation Association and the launch of a helpline for financially troubled employees.

In Papua New Guinea, we participate in on-going engagement with all stakeholders, including employees, provincial and local government, landowners and regulators.

# EMPLOYEES AND COMMUNITIES CONTINUED

During FY15, Harmony was not affected by strike action. In South Africa, the two-year wage agreement is up for renewal and planning for the negotiations commenced in May 2015.

In Papua New Guinea, no strike action took place during the year.

## NOTEWORTHY ACTION

### Maintaining peace and stability in our workforce

We endeavour to maintain peace and stability in our workforce at all times. We want our employees to feel and to be safe in all aspects at work. For more on this issue see page 59.

Our multi-union environment promotes co-existence, inclusion and collaboration. Our value of accountability extends to our unions, with all labour relations structures and processes being bound by national legislation, agreement and best practice. In addition to quarterly regional meetings with our unions, we also encourage proactive and robust engagement to address issues, on which we follow up promptly. Because communication is on-going at all levels, we have contact daily with full-time stewards, while our general managers/human resources leaders have regular interactions at branch level and with shaft committees. Harmony also engages with the unions on a wide range of employee-related issues, such as housing and employment equity.

Given the valuable role our employees play in our business, it is important that we share the news of the business with the unions. We do this through the monthly communication of operational performance to union structures.

We also work directly with our employees to address a number of issues that are key to our relationship with them. These include reviewing production incentives, introducing financial literacy to address the problem of indebtedness and replacing payroll deductions with a new system to manage emolument attachment orders and garnishee orders.

We will continue this work in FY16 and hope to continue improving both our relations with employees and their daily experiences at Harmony.

## Freedom of association

### Relevant Global Reporting Initiative indicators: G4-HR4

We recognise the right of employees and contractors to freedom of association and adhere to collective bargaining agreements in each country. Honesty is one of our values and we strive for honest, two-way discussions through collective bargaining.

In South Africa, Harmony recognises four labour unions. As at financial year-end, these unions and their corresponding representation were as follows, namely the National Union of Mineworkers (at 66%); the Association of Mineworkers and Construction Union (at 15%); the United Association of South Africa (at 10%) and Solidarity (at 2%). About 93% of our South African workforce is unionised, with the balance not belonging to a union.

### Union representation at Harmony's South African operations (%)



\* Sum of agency shop agreements and non-unionised

There are no active unions at our Papua New Guinea sites. Industrial relations at Hidden Valley are currently managed by the mine's employee representative committee.

## TRAINING AND DEVELOPMENT IN SOUTH AFRICA

### Relevant Global Reporting Initiative indicators: G4-LA9

We are in competition for key human resources and critical skills. Upskilling in core and critical areas increases the skills pool and lends stability to continued operations.

Employee development is pivotal to Harmony's strategic and operational delivery. All training and development programmes are carried out in line with the company's strategic and operational needs through a wide range of programmes. These include skills development, adult education and training, the bridging school, learnerships, bursaries, graduate development, talent management and supervisory and leadership development. Some 4.9% (FY14: 4%) of the payroll is spent on human resource development.

In addition to upskilling our own employees, we recognise that community members could benefit from our programmes. We devote considerable effort to programmes such as bursaries and the bridging school – that allow young learners from local communities to improve and continue their studies. This has the potential to benefit Harmony in the long run, too, as it encourages promising students to take up careers in fields in the mining industry.

In FY15, 96% of our workforce received training compared with 62% in FY14. This increase was mainly due to the effect of the restructuring where employees were transferred to other operations and/or positions. Training costs during the year amounted to R371 million (US\$32 million) including support for South African-based research and development initiatives intended to develop solutions in exploration, mining, processing, technology efficiency, beneficiation as well as environmental conservation (FY14: R283 million (US\$27 million)). In FY15, 69 people were trained in critical skills at a cost of R1.0 million (US\$0.1 million), compared with 56 people in FY14 at a cost of R1.1 million (US\$0.1 million).

To facilitate transformation in South Africa, a total of 1 159 employees received training on diversity management issues which served as groundwork for the proper implementation of employment equity. Of those who received such training, 68% (FY14: 67%) were historically disadvantaged South Africans of whom 14% (FY14: 12%) were women.

The Mining Charter in South Africa placed significant emphasis on training and development. At the end of our reporting period, Harmony's operations met the requirement that 5% of the payroll costs be spent on employee training and development.

### Adult education and training

#### Relevant Global Reporting Initiative indicators: G4-LA10

Adult education and training centres at Harmony's South African operations run full-time classes to ensure that employees are functionally literate and numerate so as to allow for personal growth and transformation within South Africa.

In FY15, 476 employees (FY14: 1 099) and community members were enrolled for classes, at a cost of R32 million (US\$3 million) (FY14: R52 million (US\$5 million)).

The overall pass rate for FY15 was 53%, a 12% improvement on the previous year (FY14: 41%). The roll-out of e-learning at the adult education and training centres, which is scheduled to begin around September 2015, will increase the number of participants in the programme since employees will have the opportunity to study at their own pace.

# EMPLOYEES AND COMMUNITIES CONTINUED

## Bursary programme

Harmony offers a bursary programme and a subsequent graduate-development programme. Harmony awarded a total of 33 (FY14: 38) bursaries for university studies during FY15, with 29 (88%) (FY14: 24; 63%) of these students coming from our local communities.

Discipline	4th Year		3rd Year		2nd Year		1st Year		Total by gender		Total
	M	F	M	F	M	F	M	F	M	F	
Mining	2	1	2	2	1	2	1	0	6	5	11
Engineering	0	0	2	0	2	0	0	0	4	0	4
Survey	0	0	0	1	0	0	0	0	0	1	1
Geology	0	1	0	0	1	0	0	0	1	1	2
Environmental	0	0	0	0	0	0	1	0	1	0	1
Other – Services	0	1	0	0	6	6	1	0	7	7	14
<b>Total</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>3</b>	<b>10</b>	<b>8</b>	<b>3</b>	<b>0</b>	<b>19</b>	<b>14</b>	<b>33</b>

## Bridging school

Harmony's bridging school supports mathematics and science at grade 12 level to assist school leavers in improving their final results to gain admission to tertiary studies. Upon successful completion of their grade 12, some are awarded bursaries while others follow the learnership route, increasing the company's learnership intake.

Since inception of the school in 1996, we have registered a total of 370 students. Of the total number enrolled over the years, 36 (10%) were awarded bursaries, 179 (48%) went through learnerships and the balance were appointed to various permanent positions, some of whom are now in management positions.

## Learnerships

Five formal learnership programmes are in place at Harmony: mining operations L2, rock breaking L3, artisan L3/4, service person L2 and winding engine driver L3. In FY15, Harmony had 247 (FY14: 283) active learners at different levels in their respective learnership programmes, of whom 55 (FY14:81) completed their learnerships. Most have been appointed to critical positions within the company.

## Internship and experiential programmes

In support of our social and labour plans, Harmony hosted 71 students (48 internships and 23 experiential trainees) during FY15 (FY14: 31 students – 20 interns and 11 trainees). Of the total number engaged, 25 (FY14: 10) students completed their exposure programmes during the period under review. Harmony currently has a total of 46 active students – 31 internship students and 15 experiential trainees (FY14: 21 students – 17 interns and four trainees).

## Our social plan programme

Through its social plan programme, facilitated by the framework agreement entered into between Harmony and the National Union of Mineworkers in 2003, which was and still is the majority union, the company continues to provide alternative skills training to employees (both current and retrenched employees). This enables people to be economically active beyond mining. It also cushions the impact of unavoidable retrenchments for economic reasons or when our mines reach the ends of their lives. The alternative skills acquired give employees access to employment opportunities in other sectors of the economy outside mining, and promote a culture of self-employment to improve quality of life.

The social plan framework agreement provides for employees who elect not to undergo training themselves to nominate a dependant (proxy) to receive training in their stead.

## Future forums

Future forums are in place at Harmony's operations and comprise representatives from mine management and organised labour. Future forums were set up to deal with issues such as productivity improvements and long-term mine sustainability, job security and creation, and ameliorating the impact of downscaling and retrenchments on employees (and their families), communities and the local economies where these cannot be avoided.

Members of future forums are inducted or capacitated on a continuous basis based on: the National Social Plan Policy, Harmony's Social Plan Framework Agreement, compliance with Social and Labour Plan Regulations, and their functions.

The forums are consensus driven and operate in a completely transparent environment. Parties to the forums work together to achieve its objectives. The culture and approach of the forums is one of joint problem solving, with management and organised labour negotiating to prolong the life of the mine so as to achieve the best possible benefits for all stakeholders. All necessary information is made available to the forums to ensure they make fully informed decisions.

### Portable skills development

During the period under review, 421 employees were trained, of which around 83% were proxies (dependants of mine employees). Since the execution of Harmony's mining licences, some 4 451 employees have been trained in portable skills.

The range of basic skills provided cuts across economic sectors, ranging from information technology (computer literacy), electrical, welding and basic motor mechanics to catering, baking and clothing manufacturing.

### Portable skills training conducted in FY15

Mine	Number of employees (or proxies) trained	
	FY15	FY14
Bambanani	34	54
Joel	17	–
Masimong	144	176
Phakisa	56	–
Target 3	6	–
Tshepong	74	48
Unisel	90	166
<b>Total</b>	<b>421</b>	<b>394</b>

### TRAINING AND DEVELOPMENT IN PAPUA NEW GUINEA

In FY15 there were 4 653 workforce training events at Morobe Mining Joint Ventures in Papua New Guinea. Specific initiatives in FY15 included:

- Personal development courses
- Level 2 supervisor development programme for mining supervisors
- Integration of level 1 programme for drill and blast supervisors and coordinators
- Information and technology training for trainer supervisors
- Tier 1 and 2 induction and training
- Operator efficiency training

### Employee educational support

Morobe Mining Joint Ventures provided over R44 million (US\$3.9 million) in Educational Support for 347 employees' dependants in Papua New Guinea.

### Morobe Mining Joint Ventures' landowner school tuition assistance

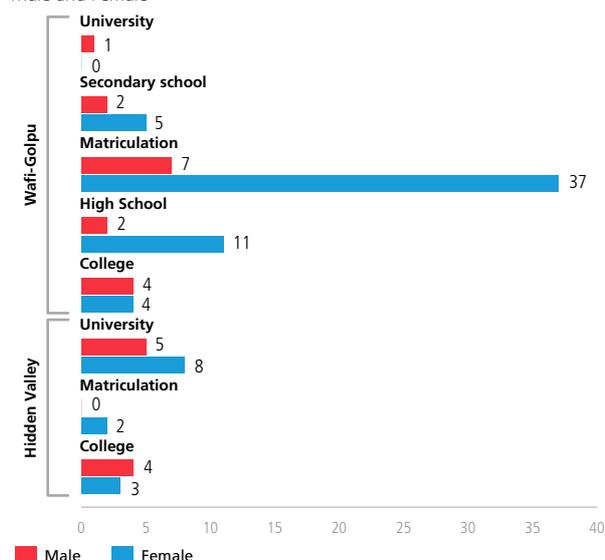
The Morobe Mining Joint Ventures tuition assistance programme for Hidden Valley and Wafi-Golpu landowners was completed in quarter 3 of FY15, with 95 successful applications and R473 877 (US\$41 000) paid to 14 institutions.

# EMPLOYEES AND COMMUNITIES CONTINUED

Compared to 2014, there was a significant 62% increase in successful applications in 2015, including 42 for distance-mode education, 13 for colleges and four for universities. Current trends indicate that more Hidden Valley students attend tertiary institutions while Wafi-Golpu has more students opting to upgrade to matriculation (University Entry Level) through distance education at the University of Papua New Guinea's Morobe University Centre. See figure below.

## Morobe Mining Joint Ventures landowner tuition assistance FY15

Male and Female



## Women's development programme

Landowner women's groups from the Hidden Valley area submitted proposals to the Mineral Resource Authority Women in Mining Small Grant Programme and three were considered successful by the programme steering committee. The project agreements were finalised with the Mineral Resource Authority and more than R1.08 million (US\$0.1 million) were released to the groups for their respective proposals including guesthouses and passenger motor vehicles.

A training needs analysis of 165 women between the ages of 15 and 60 years was conducted by the Chamber of Mines and Petroleum Women in Mining Programme. The data was then analysed and results used to assist with the development of programme plans for impacted and affected areas.

In December 2014, the new Wau Women's Resource Centre was successfully completed and formally handed over to the community.

## Education programmes

The Department of Education and the Morobe Mining Joint Ventures' education team inducted 12 trainee teachers from six elementary schools in the Wafi-Golpu region. This resulted in two schools starting early childhood classes in Pekumbe and Venembeli, while Hekeng and Towangola continued classes.

Teachers at all operating schools in Bulolo received their back-pay after many years of teaching without pay, and are now on the government payroll.

Morobe Mining Joint Ventures funded excellence awards for students in 14 elementary schools. District education advisors and the Honorable Member for Huon Gulf, Ross Seymour, acknowledged Morobe Mining Joint Ventures for the awards. Since 2012, Morobe Mining Joint Ventures has provided excellence awards to a total of 83 students.

The Nauti Elementary School is now fully operational with four teachers and has enrolled 167 students in all four classes. The Nauti community contributed a house, kitchen and toilet for the newly appointed community school teacher.

During the fourth quarter, the Morobe Mining Joint Ventures' education team assisted with a two-week in-service course for 11 elementary teachers from five elementary schools in the Wafi-Golpu region. It was jointly facilitated with Bulolo District Elementary trainers and standards officer.

## EMPLOYMENT EQUITY

### Relevant Global Reporting Initiative indicators: G4-EC6, G4-HR3

A representative workforce is both a legislative and moral imperative in South Africa, one which ensures economic growth benefits for all stakeholders. As a result, employment equity is an important consideration, taking into account the historical context of the areas in which we work to ensure equality wherever possible.

We ensure that our migrant employees are able to return home regularly. We also aim to make it easier for employees to have their families visit them by making available spouse quarters for visiting family members. We have several local economic development projects in labour-sending areas, such as Mozambique and Lesotho, as well as an agreement to provide home-based care to medically incapacitated employees from all areas.

The company reports its employment equity plan and progress to the social and ethics committee quarterly and to the Departments of labour and mineral resources annually.

In FY15, 58% (FY14: 46%) of Harmony's management staff were historically disadvantaged South Africans, exceeding Mining Charter targets for company-level compliance. The increase in compliance indicators is due to alignment of Harmony's reporting with the Department of Labour's classification guidelines – (EEA9). For previous years, indicators were based on Patterson grade D-F only whereas C band employees are now classified as Junior Management and have been included in the 2015 employment equity percentage.

Women employed at management level stood at 16% (FY14: 20%) The decrease is due to retrenchments during the year which included women. There is no difference between salary scales for men and women at Harmony.

#### Employment equity plan

Occupational categories	2014 Plan (%)	Achieved June 2015 (%)
Board	40	60
Top management – Executives	40	44
Senior management	40	40
Middle management	40	46
Junior management	40	56
Core and critical	40	63

In Papua New Guinea, we are focused on attracting and retaining both externally and locally recruited employees, particularly landowners and local citizens. Operations are governed by a three-year training plan lodged with the Department of Labour. Under this plan, the joint ventures must ensure locally sourced employees are continuously trained and succession is managed. 95% of all Morobe Mining Joint Ventures' employees are Papua New Guinean citizens.

At Hidden Valley, women in the workforce stood at 10% in FY15 (FY14: 13%), below the national average of 14% (FY14: 15%). This fall is due to the reduction of the Morobe Mining Joint Ventures' workforce during FY15.

## HOUSING AND LIVING CONDITIONS: SOUTH AFRICA

Improved living conditions for our employees are directly linked to enhanced employee well-being and productivity. In addition, our housing programme creates jobs and supports local business. Harmony only appoints local empowered companies (see our procurement spend on page 98 of this report, in line with the Mining Charter) when embarking on construction and building projects. Our key challenge in FY15 was that we were unable to comply fully with the Mining Charter target for housing and living conditions.

Our housing strategy is focused on promoting home ownership and rental options and on integrating mining communities into local municipal structures. We make land available and facilitate affordable housing development on our redundant mine land – for all new developments we fund construction of infrastructure such as power and water, manage the project and monitor quality. We also proclaim mine villages for inclusion within municipal areas. In line with our focus on home ownership, employees who do not live in company hostels receive living-out or housing allowances.

# EMPLOYEES AND COMMUNITIES CONTINUED

Our hostel de-densification programme ensures that employees have access to private living space. To enable employees to move their families closer to our operations, our hostel conversion programme makes available family units; we also seek to provide family accommodation in local towns. At Harmony, we are aware that corporate social responsibility extends beyond the surrounding communities.

	Mining Charter Harmony target		2015 *		2014		2013	
	target 2014	target 2015	%	Achieved	%	Achieved	%	Planned
Hostel (operational) conversion to single rooms by 31 December 2014	100	8 658	100	8 695	19	1 678**	13	1 102**
Hostel (non-operational) conversion to family units	100	1 100	84	927*	69	761	61.7	561
Facilitation of home ownership***		4 719	63	2 961***	59	2 800	53	2 496
<b>Total</b>			<b>82</b>		<b>49</b>		<b>42</b>	

\* To date, we have been unable to procure funding from the government and/or the Department of Human Settlements for the Deelkraal hostel conversion

\*\* The data reported for 2013 and 2014 represents units in 100% converted hostels. The number of single rooms, including those in uncompleted hostels, totalled 5 027 in FY14 (FY13: 3 214)

\*\*\* Houses sold to employees and other housing development programmes (actual achieved will depend on employee affordability profiles and the ability to obtain finance). Certain elements are beyond Harmony's control, such as whether employees are granted bonds or receive state subsidies. Therefore bank lending, affordability and indebtedness remain stumbling blocks to increased home ownership

In FY15, the number of hostel dwellers sharing accommodation declined from 6 841 (FY14) to zero, with all employees now housed in single rooms. We aim to build 1 100 family units over three years. Some 927 units have been built to date – 84% of the total planned (FY14: 761 units, 69% of that planned). Merriespruit 3 is in progress while Deelkraal is at feasibility stage.

To further facilitate home ownership, Harmony subscribes to and supports the pension-backed home loan scheme as negotiated for the industry by the Chamber of Mines. In all, 1 441 (FY14: 1 100) of our employees have already made use of this facility. During FY15, 110 of our houses were purchased by way of a 'rent-to-own scheme' (FY14: 12).

## HUMAN RIGHTS

### Relevant Global Reporting Initiative indicators: G4-LA14, G4-HR3, G4-HR10 and G4-HR12

Respect for human rights is entrenched within the company's values and specifically catered for in human resource policies, charters and contracts of engagement. This is closely monitored by our human resources function and community engagement managers at operational level.



Merriespruit housing complex

We abide by the human rights conventions of the International Labour Organisation, as supported by the South African constitution. Our adherence is monitored by the social and ethics committee. In addition, certain human rights requirements are built into contracts with new suppliers.

No incidents of discrimination were reported in South Africa or Papua New Guinea in FY15.

The South African constitution also prohibits forced, compulsory or child labour. None of Harmony's operations are at risk of human rights contraventions and no contraventions of these principles were alleged or reported in FY15.

## COMMUNITIES

### Relevant Global Reporting Initiative indicators: G4-S01

Key statistics: local economic development spend	FY15	FY14
Group local economic development spend	<b>R63.5 million (US\$6 million)</b>	R77.1 million (US\$7.4 million)
– South Africa	<b>R62.5 million (US\$5.5 million)*</b>	R71.7 million** (US\$6.9 million)
– Papua New Guinea	<b>R1.0 million (US\$0.1 million)</b>	R5.4 million (US\$0.5 million)

\* In addition, capital of R89 million (US\$8 million) was spent in FY15 on hostel upgrades

\*\* In addition, capital of R106 million (US\$10 million) was spent in FY14 on hostel upgrades

We are committed to the sustainable socio-economic development and well-being of the communities where we operate. We recognise that it is from these communities that we draw our employees and that healthy, flourishing communities can provide us with the calibre of employees we need to run our business. Their well-being and development underpins our own sustainability. Apart from being a statutory requirement, our strategic objective is to contribute to the sustainable development of our communities long after mining has ceased.

In South Africa, Harmony's operations are governed by the allocation of mining rights, with each mining right area bound by an approved social and labour plan. In Papua New Guinea, regulatory control vests in a memorandum of agreement between Morobe Mining Joint Ventures and local communities and key landowners with similar social commitments to those in South Africa.

Harmony has reached the end of the first five-year Mining Charter target period. Please refer to page 168 for the status of Harmony's achievements in terms of the Mining Charter targets. All of Harmony's mining rights scored in the 'Excellent Performance' category for 2012, 2013 and 2014 calendar years. In addition, we operated in line with our social and labour plan commitments at all South African operations.

## SOCIO-ECONOMIC, POLITICAL AND REGULATORY CHANGES

Our company, employees and communities are affected by socio-economic, political and regulatory changes. Changes include amendments to labour, mining and environmental legislation and political and regulatory changes. Our compliance efforts impact directly on our social licence to operate and thus on our sustainability. We endeavour not just to comply with laws and regulations but to "go the extra mile". We conduct regular meetings with stakeholders such as government and community leaders to address concerns, grievances and misperceptions.

## SOCIAL AND LABOUR PLANS

### Relevant Global Reporting Initiative indicators: G4-EC4

For the five-year cycle ending December 2017, Harmony's planned social and labour plans constitute R844 million of which, as at 30 June 2015, we had spent R405 million on local economic development projects.

To make a relevant and thus sustainable contribution to local communities, we have aligned our social and labour plans with municipal integrated development plans. Social and labour plans are currently in place for each mining right for the period 2013 to 2017.

A Harmony-led forum meets regularly, bringing together stakeholders to discuss and agree on key projects for the Free State goldfields region, with the aim of identifying and developing industries lacking in the local economy and the enterprises necessary to service those industries.

Expenditure on local economic development projects in South Africa decreased from R71.7 million (US\$6.9 million) in FY14 to R62.5 million (US\$5.5 million) in FY15. This decrease was due to delays in various projects, which we are addressing and trying to resolve quickly.

# EMPLOYEES AND COMMUNITIES CONTINUED

## NOTEWORTHY ACTION

### LOCAL ECONOMIC DEVELOPMENT PROJECTS: MAKING A DIFFERENCE

#### Legacy projects

*(projects aimed at leaving something for the community after all mining operations in the area have been closed)*

The legacy projects are applicable to all Free State operations in the Lejweleputswa Municipal District

#### Merriespruit 3 hostel conversion project

The contract for the conversion of the Merriespruit 3 hostel to community rental units was signed on 28 March 2013. A 100% black-owned construction company was awarded the tender and started with the project in June 2013. The project was 81% complete as at 30 June 2015.

972 jobs were created during construction and 30 permanent jobs. All these jobs were filled by members of the local community. We will continue this work in FY16 and hope to continue improving both our relations with employees and their daily experiences at Harmony.

#### Film studio

A film studio project was launched in 2012 to establish an international film and television studio facility on a site (approximately 700 square metres) in Welkom, in the Free State province. The film studio company signed a land availability agreement with Harmony on 24 April 2012, giving the studio access to land for the development of a television and film studio facility.

The film studio company has also secured the commitment of the Free State Provincial Government which has in turn appointed three departments, namely, Sports, Arts and Culture, Tourism, and Economic and Environmental Affairs, to work alongside the team to ensure the success of the project.

During the year, a feasibility study and a business plan were completed. The land agreement was signed and the process to provide a radiation clearance certification is in progress.

#### Virginia Sports Academy

The purpose of this project is to identify sporting talent among previously disadvantaged youth. Those identified are each offered an annual bursary to the value of R94 000. The students stay in our hostel and attend local schools. Signed contracts are in place between parents/legal guardians and the Virginia Sports Academy.

The bursary covers the following:

- Accommodation, including three meals daily
- School fees
- School clothes
- Sports clothing
- Transport to and from school and sports tournaments
- Medical expenses

Beneficiaries of this project are talented youths from both local communities and those in our labour-sending areas. The cost of this project, which employs 16 people on a permanent basis, is R8 million annually. In all, 72 boys (36 soccer players and 36 rugby players) benefit annually.

This project also has a dedicated functional website ([www.vsportsacademy.co.za](http://www.vsportsacademy.co.za)).

Some of the well-known students from the academy include Cecil Afrika (SA Rugby), Branco du Preez (SA Rugby), Seabelo Senatla (SA Rugby), Eugune Cunha (Blue Bulls Rugby), Tumelo Nhlapo (Bafana Bafana), Lerato Manzini (Bloemfontein Celtics), Nelson Molale (Kaiser Chiefs) and Keamo Wolff (Jomo Cosmos).

#### Nyakosoba High School

This project for Nyakosoba High School, located in Lesotho, was started during 2010 and was completed during FY15. It has provided 10 classrooms, ablution facilities both for learners and for educators, an administration block with offices for the school principal, the deputy principal and administration staff and a staff room as well as a kitchen.

**NOTEWORTHY ACTION** *continued***Virginia Jewellery School**

This project was identified for the Matjhabeng Municipality, Lejweleputswa district. In all, this jewellery school has created 150 jobs since its inception. Of these, 10 are permanent. Currently, 18 Mining Qualifications Authority students and eight students attend the school. All local communities benefit from this project, as jobs are created and jewellery skills training and assessment of learnerships is done in the area. The Virginia Jewellery School has produced five qualified goldsmiths.

The total cost of the jewellery school since inception in the year 2000 is R18 million. A dedicated website ([vjsjewellers.co.za](http://vjsjewellers.co.za)) for the jewellery school was completed and went live at the end of December 2014.

The school, which now employs four qualified goldsmiths, opened an outlet shop in the Goldfields Mall, in Welkom, in April 2015. A trade-off agreement has been signed with a well-known retail group, in line with Harmony's strategy to enable this project to become self-sustaining.

**Bridging school**

Local students are selected to improve their matric grades in mathematics and science. This initiative ultimately assists such students to improve their chances of securing bursaries to study further, of acceptance at tertiary institutions and of entering into various learnerships as part of Harmony's talent pool.

In all, 20 local youth, who are classified as being historically disadvantaged, are given the opportunity to attend Harmony's bridging school for one year after finishing their Grade 12 school year. The pass rate for the students improved from 57% to 63% for mathematics, and from 54% to 61% in science during the 2014 academic school year. All students began learnerships with Harmony in January 2015 (12 in mining and eight in engineering).

**Harmony Business Development Centre**

The Harmony Business Development Centre also known as the Enterprise Development Centre is the main vehicle through which we drive our Enterprise Supplier Development initiatives. Since opening its doors in Welkom in 2009, the business development centre has created a platform for more than 500 companies that have sought to do business with Harmony. The majority of these companies are in the maintenance and construction sector as opportunities in this area were set aside exclusively for historically disadvantaged South African companies.

Relevant companies submit their profiles to the Harmony Business Development Centre and, if their services or product offerings match procurement opportunities that arise, they are invited to quote and submit tenders. The Harmony Business Development Centre provides technical guidance and support to the companies that succeed in accessing business at Harmony. The centre oversaw contracts with the companies selected to the value of R163 million from inception in 2008 to December 2014.

Other activities that Enterprise Supplier Development and the centre focused on included the following:

- Registering companies as vendors to Harmony
- Facilitating shorter payment periods
- Coaching and mentoring
- Training and skills development
- Incubation
- Provision and facilitation of financing
- Ensuring compliance with applicable legislation

The business development centre provided seven employees with permanent jobs and R1.6 million was spent on the centre in the 2014 calendar year.

**Training programmes**

A number of training workshops have been conducted in the past, including training conducted by Enactus. They trained suppliers on the Harmony Business Development Centre database and a company called 'Running Business Today'. The training conducted is comprehensive and based on business simulations for youth and women in the community of Nyakallong near Allanridge. Business training for 24 beneficiaries to the value of R81 851 was conducted in FY15.

# EMPLOYEES AND COMMUNITIES CONTINUED

## **NOTEWORTHY ACTION** *continued*

### **Reasebetsa Women Co-operative**

Reasebetsa Women Co-operative is 100%-owned by women, to which Harmony has given the opportunity to reclaim bricks and steel from the African Rainbow Mineral 1 mine site, near the Harmony Business Development Centre. The project is a test study to determine if this approach to reclaim and rehabilitate land will benefit the targeted groups, namely women and youth. The project generates income for about 15 people who did not previously earn an income. Harmony bought tools and relevant equipment to be used to reclaim and clean the bricks and is also to assist with market development. A service provider named 'MCBE' was enlisted to guide and advise on this project. Reasebetsa took over the site in August 2014 and by the end of December 2014, about 100 pallets of bricks had been collected. These bricks were sold to members of the public.

Project beneficiaries include the youth from Thabong community, who were part of the pressure group that marched to demand jobs from Harmony. This initiative is viewed by stakeholders as being progressive and worth implementing at other Harmony sites targeted for demolition. Harmony spent R128 738 on training in FY15 and Reasebetsa generated revenue of approximately R70 000 and the lives of the participants have improved substantially.

### **Tsebo Multi Skills Co-operative**

Tsebo is a youth-owned co-operative from Nyakallong near Allanridge. The Harmony Business Development Centre facilitated Tsebo's becoming a vendor in the field of construction and maintenance. Tsebo was awarded its first construction job at the Phakisa mine in December 2014 to renovate the training centre. An established contractor, The Power of Junction, was asked to guide and mentor Tsebo through the project.

### **Small, medium and micro enterprise development – expansion of the feed mill**

Harmony facilitated the granting of funding to the amount of R9 million from the National Empowerment Fund for the establishment of a feed mill. The feed mill is situated at Dihoai farm, which is in the Matjhabeng municipality between Welkom and Odendaalsrus towns. Chicken feed is the most expensive input material in the poultry business and the ability to access feed at a cheaper rate would enable small chicken farmers to be more competitive and increase their chances of making a profit. By end of FY15, the feed mill construction was 100% completed and the civil works around the plant was completed.

Construction of the feed mill led to the creation of 19 permanent jobs and the beneficiaries of the mill were co-operatives and local small, medium and micro enterprise development.

### **Small, medium and micro enterprise development – upgrading of abattoir**

The need for an abattoir to cater for the small poultry producers was identified, where small poultry producers can slaughter their fully grown chickens at an affordable price. Harmony undertook the renovation of an existing abattoir that had not been built to the correct standards and specifications so that it now meets the requirements of the Department of Agriculture. Harmony engaged contractors to do the renovations, and to install electricity, air conditioners, refrigerators and cooler rooms.

In all, this project created 20 permanent jobs during 2014 and, as with the expansion to the feed mill, the beneficiaries were the co-operatives and local small-, medium-, micro-enterprise development. The total cost of the project is R5 million, of which R683 392 was spent during calendar year 2014. The project is expected to be completed by December 2015.

Training was provided by Harmony and a partnership was formed with the Department of Agriculture.

### **Small, medium and micro enterprise development – manufacturing of Motoho**

The project, identified for the municipal district of Lejweleputswa in the Matjhabeng local municipality, involves Golden Goose Catering Services, a black woman-owned enterprise that produces Motoho, a soft porridge drink, which is very popular in the local communities. This enterprise employs 40 people and the beneficiaries of this project will be local communities, the owners of Golden Goose and the consumers of the product.

The cost of the project will amount to R1.2 million. Timing for completion is dependent on marketing and trade off agreements, estimated to be completed December 2015.

### **Thabong Industrial Project**

The Matjhabeng Municipal Council requested Harmony's assistance with the formalising of the informal light industrial park in Thabong, in the Lejweleputswa district municipality of the Matjhabeng local municipality. The aim of this project is the development of the Thabong Industrial area alongside Constantia Road West. The intention is to establish land zoned for light industrial use by emerging entrepreneurs alongside the busiest road leading into Thabong.

**NOTEWORTHY ACTION** *continued*

Harmony approached the Enactus students from Central University of Technology in June 2014 who agreed to assist with the ground work. The council provided the students with a letter of approval and they started work on a survey of the current status of the entrepreneurs who operate from this site, and what specific requirements would be needed to formalise the site.

The students embarked on a site-cleaning campaign followed by a marketing drive and a day of training on health and safety, marketing and business skills.

A professional team compiled a report on how best to turn the site into a state-of-the-art light industrial area. The completed report has been submitted to the council. This project will generate employment for 400 people. Currently 162 people are employed. The feasibility study was completed in January 2015 and the business plan requesting funding has been revised and submitted to the Department of Trade and Industry. The total estimated value of the project is R70 million, of which Harmony has so far contributed R1 million for the feasibility study and paid R269 000 for the business plan.

Currently, there are 24 different businesses on site. The businesses represent 12 different types of manufacturing and two different tailors. This project has tremendous potential to prove that municipalities can be developmental in nature. It must be seen as a "best practice exercise" where, through careful research and a variety of inputs from various stakeholders, township businesses and manufacturing can become fully competitive and commercial.

**Wellness Centre Kutloanong**

The clinic is in the municipal district of Lejweleputswa, in the Matjhabeng local municipality. The clinic is housed in the multipurpose centre in Kutloanong, the municipality building, that was renovated at the cost of R521 000. Renovations were done by a local black empowered company and three temporary jobs were created. Beneficiaries of this project are the local communities of Kutloanong.

Among other things, the centre is also used for the following:

- Hosts HIV/AIDS support groups in the area, as well as young adults over the age of 25
- Provides career information and other social interventions to young people
- Public meetings and literacy classes for the elderly

**Small, medium and micro enterprises and skills development centre**

The second phase of the small, medium and micro enterprises and skills development centre was completed in August 2014 and the project handed over to the local municipality. This second phase included paving of walkways and the parking area and landscaping.

The goal of the project was the establishment of a skills development and small, medium and micro enterprises centre to facilitate skills diversification within the Ratlou local municipality.

Beneficiaries of the project, which has created 30 temporary jobs, are the communities within the Ratlou local municipality. The third phase of the project – development of the digital hub (computer centre) is in the planning phase.

**Tshwaraganang sewing**

Tshwaraganang Sewing is a co-operative belonging to 10 women from Kraaipan. Harmony helped find accommodation to house the co-operative and purchased 10 sewing machines for the women's use. The women received training on how to use the machines and were awarded certificates. The local communities of the Ratlou Local Municipality, Ngaka, Modiri and the Molema District Municipality will benefit from this co-operative.

Harmony contributed R800 000 towards this project which has been completed in December 2014.

**Upgrading of the water supply in Kraaipan Village**

This project, which addresses the local service-delivery backlog, was agreed with the Ratlou municipality which had requested assistance together with the Department of human settlement department within the Ngaka Modiri Molema district.

The first phase of this project was to provide water and reverse-osmosis purification plants for the Kraaipan area. Harmony contributed funding of R3.5 million to the Ratlou municipality for this project. The reverse-osmosis machine and holding tank were installed onsite and the holding dam and commissioning of the plant were completed by the end of May 2015.

This first phase created 18 jobs during the year, with the beneficiaries all being from Kraaipan Village.

**Ludeke Junior Primary School**

The Ludeke Primary School is located at the Ludeke Mission in the OR Tambo district municipality in the Eastern Cape, about 15 kilometres away from the OR Tambo monument. It was established in 1914 as a mission school. The school has a rich heritage, having produced world-class alumni, most notably the late world-renowned freedom fighter, Oliver Reginald Tambo.

## EMPLOYEES AND COMMUNITIES CONTINUED

### **NOTEWORTHY ACTION** *continued*

The school is overcrowded with, on average, more than 60 learners per classroom. All buildings have deteriorated over the last 27 years. The now-dilapidated buildings were constructed using prefabricated material. Harmony will be one of two funders supporting this project. The renovations will consist of building classrooms, ablution facilities, a library, a computer centre and the administration block. The school, which employs 20 teachers, enrolls pupils from Grade R up to Grade 9. Total enrolment is 684 pupils, the immediate beneficiaries.

It is estimated that this project will benefit around 27 000 children over the next 40 years. It will also empower the local community to take ownership of their school, ensure long-term sustainability and give their children the education that every South African child deserves.

Harmony, which will contribute R1 million annually to this project, has signed a three-year memorandum of understanding in July 2013 with the South African National Civic Organisation's Development Initiative (the principal of the Ludeke Junior Primary School Renovations project).

This first phase of the project began on 28 March 2014 and was completed on 1 October 2014. Phase one generated employment for 13 people within the community. Phase two, scheduled for completion in December 2015, aims at building classrooms.

### **Waste Recycling Project, Khutsong**

This is a collaborative project between three mining companies – including Harmony — and the Merafong municipality. Each mining company will contribute R1 million over three years (2012- 2014). The project site is in Fochville within the Merafong City local municipality. The aims of the project are community empowerment, job creation, recycling of waste within the Merafong community and addressing environmental issues. The project is going well and the following key components have been accomplished:

- Paper from Harmony's Randfontein Office Park is collected for recycling by the project
- The permanent structure is complete and construction of two additional toilets is in progress
- Application for an electrical connection has been made and the fees paid to the municipality. Installation will be done by the municipality, but in the meantime equipment is being run on temporary supply
- A bailing machine has been purchased and is in use
- A community event was held in July 2014 in Kokosi Extension 5 to promote recycling and environmental issues. This event prompted a dramatic increase in incoming recyclables and enabled the project to establish relationships with many collectors in the area
- Eight local people are permanently employed and an administration assistant will be employed shortly
- An agreement has been reached with a big recycling company which already has waste paper for recycling

### **Merafong Digital Hub**

This hub is doing well and has begun several computer training programmes for out-of-school youth and for the members of the community. Harmony continued to support the youth of Merafong with computer-literacy training. There was another intake in August 2014 of 50 young people for the Computer Literacy Course. The Computer Training National Qualifications Framework Level 3 is a three-month course. The course, which covers basic information technology skills, is accredited by Media, Information and Communication Technologies Sector Education and Training Authority E-Learner and endorsed by International Computer Driving South Africa.

This project is a collaboration between Harmony and one of our peers. Each company contributed R500 000 to establish a community digital hub which is housed at the Khutsong Business Centre.

The aims of the project are to:

- give young people an opportunity to develop digital media skills and training
- foster innovation, technological development and creativity in a supportive entrepreneurial environment
- offer members of the local community the opportunity to gain information technology skills
- provide the community with services such as the typing of curricula vitae, printing, copying, binding, faxing and so on, at affordable rates and without added travelling costs

**NOTEWORTHY ACTION** *continued***Deelkraal Community Rental Units**

This proposed project entails the development of the vacant Deelkraal hostel complex into a community rental project with all the amenities necessary to sustain a vibrant community. The planned project will consist of 556 one- to three-bedroom flats and will include a primary school and other social amenities. The aim is to provide affordable rental units to the local mining communities.

The estimated project value is in the region of R180 million and will be a joint effort by Harmony and the Merafong municipality. The project will ultimately be handed over to the municipality as the owner and manager. Harmony has completed the development of eight show flats to the value of R2.8 million. A funding application and feasibility report have been submitted to the Gauteng Department of Human Settlements and we await its favourable response.

**Small, medium and micro enterprises development**

The Merafong local municipality has requested Harmony's assistance with the branding of the small, medium and micro enterprises stalls that have been built. The municipality has embarked on the formalisation of small businesses. This branding will enhance visibility of the stalls and attract customers, as well as save on marketing costs.

Communities will also recognise that Harmony is integral to their lives. In the next financial year (FY16), the project will continue with the renovations of hawkers' stalls in Wedela, Kokosi and Carletonville.

**Woolgrowers Support Programme**

The objective of this project is to build capacity for woolgrowers in the Eastern Cape. The project caters for 183 individuals with 1 900 sheep. Villages involved are Thonti, Mazeni, Magamzeni, Mabovu, Bipha, Mfundisweni, Ndakeni and Dudumeni.

Services include training in sheep shearing, sorting and the packaging of wool. They also help farmers to understand the supply chain and how it affects them, helps organise the sheep farmers into a legal entity and enhance the farmers' capacity to increase their negotiating power. Harmony worked in partnership with Department of Agriculture on this project, which was completed in the 2014 calendar year.

**Slovoville and Dobsonville digital hubs**

This project commenced towards the end of May 2014. The model for the digital hub was taken from the one which was successfully implemented in Merafong.

The Soweto hubs employ 20 people, and beneficiaries of this R2.5 million project include the local communities and youth co-operatives.

The digital hubs in Slovoville and Dobsonville were completed and have been operating since October 2014. The hubs provide communities with much-needed services closer to home and more-reasonably priced. Services offered include typing, printing, copying, binding, faxing, Internet access (which enables people to look for employment) and facilitates business development and training. The two co-operatives (five members each) running both hubs have received on-the-job training in 2015.

**Small, medium and micro enterprises development – cleaning detergent factory**

This R1.9 million project is in the municipal district of the City of Johannesburg.

The factory manufactures cleaning detergents and operates from Roodepoort. Project implementation included finding suitable land, construction of the factory, power, water and sewer connections, equipment sourcing, labour sourcing, training, sales and marketing, branding, accounting and web design.

The factory initially started with eight people and increased this number to 25 as it grew and expanded its market. The factory is busy creating more than 80 self-employment opportunities by locating merchants (people willing to buy and sell our products).

Both the employees and the distributors are beneficiaries of this project. Implementation was completed and the factory was fully functional and operational in October 2014.

# EMPLOYEES AND COMMUNITIES CONTINUED

## SOCIO-ECONOMIC INVESTMENT

### Relevant Global Reporting Initiative indicators: G4-SO2

Our corporate social responsibility policy recognises the need for socio-economic investment in South Africa and Papua New Guinea, starting with the broader communities in which we operate. This policy includes local economic development initiatives executed in terms of the Mining Charter, the Mineral and Petroleum Resources Development Act and the codes of good practice for the minerals and mining industry. In Papua New Guinea, we comply with local, regional and national legislation, licence conditions and memorandums of agreement with associated communities and key landowners.

Our corporate social responsibility activities are monitored by the social and ethics committee at board level. In South Africa, projects and programmes are considered, approved and monitored by a corporate social responsibility committee at management level. In Papua New Guinea, this responsibility lies with the head of our south east Asian operations. In South Africa, we identify suitable programmes through stakeholder engagement and in partnership with the Chamber of Mines' community development forum, non-governmental organisations, communities, government departments, municipalities, educational institutions and the governments of Lesotho, Mozambique and Swaziland.

## CORPORATE SOCIAL RESPONSIBILITY

### South Africa

In FY15, Harmony spent R6.3 million (US\$0.6 million) (FY14: R8 million (US\$0.8 million)) on corporate social responsibility projects in South Africa. Key projects focused on educational support, social development, community support and sports and recreational development.

Harmony's corporate social responsibility priorities in FY15 concentrated on implementing programmes in mathematics, science and technology advancement, community project-based entrepreneurial skills development, sports and recreation development. Our programmes address key social issues such as building and supporting education systems and processes, including sports infrastructure and social and enterprise development initiatives.

### Community project-based entrepreneurial development programme

This programme is aimed at developing entrepreneurial skills within communities so as to promote job creation and at eradicating poverty. In 2006, Harmony established a collaborative partnership with Enactus (an implementing organisation) for youth and student leadership development so as to increase leadership capacity within South Africa, uplift the poor and fast-track enterprise and socio-economic development initiatives.

Enactus is an international non-profit organisation that brings together students, academics and business leaders who are committed to using the power of entrepreneurial action to improve the quality of life and standard of living for people in need. In southern Africa, Enactus has established student programmes on university campuses and at other institutions of higher learning (i.e. about 28 institutions in South Africa and eight in Swaziland).

Guided by academic advisors and business experts, participating students form teams on their campuses and apply business concepts to develop and implement community outreach projects that improve the quality of life and standard of living for people in need. The experience not only transforms lives, it helps students develop the kind of talent and perspective essential to leadership in an ever-more complicated and challenging world.

To date, Harmony has invested approximately R17 million in the development of the communities in which it operates and its labour-sending communities (including those in Swaziland).

More than 113 000 lives have been positively affected by the programme and the transfer of business and socio-economic skills since Harmony started supporting it.

Among the projects pursued by the Enactus teams to improve the quality of life and standard of living for people, were the bio-gas project, the arts and crafts project and the essential oils project.

- **Bio-gas outreach project – creating affordable bio-friendly alternative energy**

The bio-gas outreach project generates gas to supply sufficient power to operate a bakery. This project has successfully involved training 19 previously unemployed youths to generate bio-gas and to use this gas to operate a bakery. The bakery produces 3 000 loaves a month at a cost of R5.00 and a selling price of R7.80 each. It is a project initiated by University of Fort Hare's Enactus

team aimed at providing an alternative source of energy, through a bio-digester, in the Melani and Fort Cox communities near the town of Alice in the Eastern Cape. Most residents have no alternative but to use firewood, wood pellets or kerosene to supply the energy resources they desperately need – this project therefore provides the community with a sustainable solution. These communities cannot afford basic energy costs as they live below the poverty line of R24.00 per person per day.

The by-product of the bio-digester's slurry is utilised as an organic fertilizer in gardens, therefore reducing reliance on artificial fertilizers and increasing yield. An additional benefit is that the by-product of the bio-mass digester used to generate the bio-gas can be used as organic fertilizer in gardens. This reduces reliance on artificial fertilizers and increases yields.

#### Project facts

- Electricity is produced using an alternative energy source
- Biomass plant electricity generated and supplied to bakery
- Skilled and employed 19 community members to run the bakery
- Bakery produces 3 000 loaves each month
- Each loaf is produced at a cost of R5.00 and is sold for R7.80
- The bakery has a monthly turnover of R24 000
- 51 people are impacted directly (19 youths and 32 are other beneficiaries/members of the project)
- The provision of gas stoves has changed lives
- Beneficiaries receive a stipend to help feed their families
- Reduced reliance on government social grants

#### Growth prospects

This project is currently being extended with the roll-out of bio-gas digesters to other villages, and the establishment of a centre of excellence in bio-gas generation, as an alternative source of energy at the University of Fort Hare where future beneficiaries are trained.

The team overseeing this project plans to increase the number of beneficiaries in future and to continue expanding the bakery to allow more people to be employed and to produce a wider range of baked products.

#### • Arts and crafts project

The Enactus team of the Mangosuthu University of Technology established a centre as a platform for crafters in the Umlazi area in the province of KwaZulu-Natal, to showcase and market their products, and so promote their ability to generate income and create job opportunities. The centre also serves as a potential market place where residents and tourists can buy the arts and crafts products. The crafters, some of whom are physically challenged, are organised as a co-operative.



Kutlwanong Taxi Rank

# EMPLOYEES AND COMMUNITIES CONTINUED

## Achievements

- Beneficiaries are trained in sewing, beading and pottery skills
- A co-operative for the physically challenged is empowered to design and produce furniture (i.e. chairs and tables)

## Impact to date

- 22 beneficiaries benefit directly
- An additional eight jobs have been created, bringing the total number of jobs created to 15
- Through the efforts of the Mangosuthu University of Technology's Enactus team, funding amounting to R71 000 was secured from the national lottery to assist in buying production machines
- The crafters collectively generated a total income of R273 000 (US\$ 24 000) in FY15

## Project growth and sustainability

The project's growth strategy involves expanding to other areas around Umlazi and Durban to market and sell their products. This will include securing stalls (business space) at arts festivals and renting shops in shopping malls.

The artists and crafters have embarked on a skills development programme for learners from various high schools in art-making skills.

## • Essential oils project

This is a co-operative project initiated by the University of Zululand's Enactus team, to produce essential oils in South Africa by growing aromatic crops (e.g. rose geranium). The essential oils are to be used as ingredients in the manufacture of pharmaceuticals syrup in food and drink flavouring.

This eight-member project is located at Matshana village in rural Nqutu, 30 kilometres from the University of Zululand. The project employed eight more people to assist with the planting, harvesting and distilling of the essential oils. Planning for the project, which is in the development stage of its life cycle, started in 2013.

## Achievements

- The Small Enterprise Development Agency from uThungulu assisted with the development of a comprehensive business plan for the project
- The University of Zululand's Enactus team secured funding amounting to R350 000 from the Department of Trade and Industry to help expand the project
- Eight jobs secured to date

## Impact to date

- Eight job opportunities created
- The facilitated partnership with the South African Essential Oil Business Incubator helped to secure 100 hectares of land and seedlings to expand the project

## Future plans

- The team is planning to target export markets in the United States and Europe
- About 20 to 27 additional job opportunities will be created as the result of the project expansion

The work done by the Enactus teams and the projects developed and implemented address the twin challenges of poverty alleviation and job creation. Ultimately our objectives are to upscale and duplicate these projects in other areas of the province.

## Advancing science and mathematics

The incessantly poor uptake of mathematics and science subjects at secondary and tertiary levels is shrinking the pool of qualified scientists, engineers, innovators and researchers, and subsequently threatening the future of scientific development in South Africa. The South African Agency for Science and Technology Advancement, the business unit of the National Research Foundation tasked with advancing public awareness, appreciation of and engagement with science, technology, engineering, mathematics and innovation in South Africa, is making strides in communicating the value and impact of science and technology in a dynamic knowledge-based economy, and simultaneously building the science, engineering and technology human resource base in South Africa.

The South African Agency for Science and Technology Advancement and Harmony established a partnership in 2005 to identify and nurture talent in the critical areas of science and technology and to contribute toward addressing the shortage of skills in mathematics, science, engineering, technology and innovation, both in South Africa and the other countries making up the Southern African Development Community. Harmony became the main sponsor of the National Science Olympiad, an initiative of the South African Agency for Science and Technology Advancement.

### Milestones

Over the years, the National Science Olympiad has achieved several milestones, in particular:

- A major three-year sponsorship was secured from Harmony in 2009 which was later renewed for four consecutive years to 2015
- Through the Federation for Engineering, Science and Technology Olympiad and Competitions, the Department of Science and Technology provides the South African Agency for Science and Technology Advancement with funding to increase the participation of Dinaledi Schools by funding their entry fees. These 500 schools are earmarked by the Department of Basic Education, from across the provinces, in pursuit of improving the quality of teaching and learning in Mathematics and Science

The increased participation is due in part to the following:

- The sponsorship secured from Harmony
- Mathematics, Science and Technology coordinators
- South African Agency for Science and Technology Advancement aggressive marketing strategy within the rural areas
- Collaboration with the Department of Basic Education at provincial level through the Mathematics, Science and Technology coordinators

With Harmony's continued support, more than 127 800 learners from across South Africa and certain South African Development Community countries like Lesotho, Zimbabwe, Malawi, Mozambique and Namibia were reached over the past six years through the National Science Olympiad.

### International collaboration and learner exposure

In January 2015, South Africa's four top best-performing Grade 12 learners and two top achievers in Grade 11, who participated in the 50th National Science Olympiad in 2014, were given an opportunity to attend either the International Youth Science Forum in Australia or in the United Kingdom for two weeks.

### Papua New Guinea

In line with our goal of generating sustainable benefits for our communities, the focus in Papua New Guinea during FY15 remained on health, education, agriculture and infrastructure.

Hidden Valley's infrastructure programme focuses on constructing, repairing and upgrading roads, bridges, educational facilities, health facilities and water supply in the three landowner villages of Nauti, Kuembu and Winima and impacted communities along the Watut River corridor.

In the area of agriculture, the primary industry team focused on the Lower Watut cocoa programme and the preparation of strategic plans for agriculture and aquaculture programmes under the community participation agreement for the Wafi-Golpu communities. Farming tools and equipment were delivered and demonstrated to 36 cocoa cluster groups.

Community health and education projects undertaken and completed in FY15 include:

- The completion of a community feedback workshop on health matters during which community health surveys were reviewed. Results will be used to enhance community awareness and training aspects of the community and employee health programme and to enhance treatment and monitoring of the more prevalent diseases
- The opening of one new community health aid post and three renovated aid posts
- The Morobe Mining Joint Ventures' community affairs team in partnership with Mumeng and Wampar Health Centres fielded medical visits to Wafi villages, focusing on immunisation of community members and health talks. Some 1 814 outpatients were treated and 1 837 children were immunised against water-borne diseases (FY14: 4 022 outpatients and 906 children)
- 41 water supply and sanitation projects have now been completed, servicing 15 000 people

## EMPLOYEES AND COMMUNITIES CONTINUED

- Construction of teachers' and community health officers' houses, and school toilets at Hidden Valley and Wafi communities
- A total of six matric students from Hidden Valley and Wafi-Golpu landowning communities were sponsored for vocational and university studies in FY15
- Entrepreneurial skills training was held during January 2015 for 25 members of the Wafi-Golpu community
- Further expansion of the Women's Development Programme, which is aimed at ensuring women's issues and needs are heard and addressed with assistance from Harmony, government, donors and non-governmental organisations
- Distribution of teaching and learning materials to classrooms and presentation of excellence awards to 15 students (FY14: 18)
- Morobe Mining Joint Ventures' Cocoa Partnership initiative and collaboration with Monpi Cocoa Limited focused on funding and training of the Watut cocoa farmers
- The Nauti women's passenger motor vehicle was delivered by the Mineral Resources Authority, through the Small grant programme during January 2015. Activities are continuously being monitored
- The Yinyin Water Supply and Sanitation Project in the Middle Watut Region of the Watut River was completed during 2015. The project delivered 19 water tap stands, 11 showers and water tap combination with nine latrines were constructed. The water supply will serve a population of 1 300 community members along the Watut River
- Completion of Personal Viability training for 24 small-business entrepreneurs
- The Morobe Mining Joint Ventures tuition assistance programme for Hidden Valley and Wafi-Golpu landowners was completed during 2015 with 95 successful applications, a 62% increase compared with 2014

### PROCUREMENT

#### Relevant Global Reporting Initiative indicators: G4-LA15, G4-S010

Harmony recognises that extending our supplier network to include emerging businesses makes possible a more equitable distribution of economic benefits. Our preferential procurement strategy in South Africa complies with the country's legislation. Harmony's procurement processes and expenditure are governed by our group strategy and policy. We support this approach by helping to develop the business management skills required for these emerging enterprises to succeed.

Our preferential procurement strategy encompasses:

- Regional enterprise development centres, which make it easier for qualifying suppliers to do business with our company
- Amending tender policies to help Harmony meet Mining Charter requirements
- Measuring each mine's procurement from historically disadvantaged South African entities against targets in the Mining Charter scorecard
- Small, medium and micro enterprises and/or historically disadvantaged South African-compliant vendor development aimed at maintaining acceptable standards

Harmony's preferential procurement strategy promotes expenditure with companies recognised as black economic empowerment entities under the Mining Charter. Compliance with the target for procurement spend on services for the Doornkop mining licence was a challenge. In South Africa in FY15, procurement expenditure with black economic empowerment entities stood at R3.8 billion (US\$332 million) or 69% of total discretionary spend (FY14: R3.4 billion (US\$333 million) or 63%). The Mining Charter requires the following three black economic empowerment spend targets:

#### South African black economic empowerment spend

Required as per Mining Charter	Mining Charter (% of total spend)	FY15* progress (%)	FY14 progress (%)
Capital goods	40	76	72
Services	70	70	57
Consumables	50	66	63

\* Calculation of these figures was based on Harmony's financial year 1 July 2014 to 30 June 2015

Annual procurement spend from multinational suppliers was 0% versus the Mining Charter target of 0.5% of any supply contract. The Mining Charter of 2010 required all mining companies to “Ensure that multinational suppliers of capital goods annually contribute a minimum of 0.5% of annual income generated from local mining companies towards socio-economic development of local communities into a social development fund from 2010”. Harmony engaged all its multinational suppliers by means of a letter urging them to contribute to socio-economic development, as prescribed by the Mining Charter. Harmony is also currently exploring the potential of a Harmony-supported fund for this very purpose, which will allow for proper monitoring of contributions made by our suppliers.

In Papua New Guinea, under agreements with government authorities (local, regional and national level governments), landowners and communities, we issue contracts to local citizens wherever possible. During the year, contracts valued at R2.2 billion (US\$193 million) were awarded to local companies (FY14: R599 million; US\$58 million). Supply expenditure by Morobe Mining Joint Ventures in FY15 amounted to R3.0 billion (US\$267 million), of which R2.2 billion (US\$193 million) was expended in Papua New Guinea or 72.2% (FY14: R3.5 billion; US\$340 million and R2.1 billion; US\$200 million at 59%). Of the amount expended in Papua New Guinea, R1.2 billion (US\$108 million) was expended in Morobe Province on goods and services (FY14: R1.2 billion; US\$118 million).

Contracts awarded by Morobe Mining Joint Ventures to local landowner companies included catering, fuel haulage, general freight, plant hire, security, labour hire, cleaning, rehabilitation and bus services. Landowner companies billed R526 million (US\$46 million) during FY15, or 17.2% of Morobe Mining Joint Ventures’ total expenditure (FY14: R347 million/US\$34 million or 10% of expenditure). In line with the current Memorandum of Agreement on the Hidden Valley mine, Morobe Mining Joint Ventures continues to comply by offering business development opportunities to landowners. These opportunities will increase with the proposed development of the Golpu project.



Donation of desks and library books to Werewere Primary School - Wau District in Papua New Guinea



# ENVIRONMENTAL PERFORMANCE

Achievements	Challenges
<ul style="list-style-type: none"> <li>• Total electricity savings of 256 000MWh from all demand-side management electrical energy optimisation initiatives implemented. We are on the right trajectory to achieve our five year target</li> <li>• Harmony is the only gold mining company in the top 8 in the Carbon Disclosure Project Leadership Performance Index on the Johannesburg Stock Exchange and in the 'A' performance band on the Johannesburg Stock Exchange's 100 Climate Performance Leadership Index</li> <li>• Bioenergy project being commissioned with first gas production scheduled for February 2016</li> <li>• Memorandum of understanding signed with Department of Agriculture in the Free State province to develop a mushroom farm as a final land use</li> <li>• To advance the zero-discharge principle, Harmony is installing a water treatment plant at Doornkop and is finalising the tender for a similar solution at Kusasaletu</li> <li>• All actions related to the environment improvement plan for Hidden Valley completed except for the final site visit by the Conservation and Environment Protection Authority before signing off of the Environmental Implementation Plan submission</li> <li>• Exploration licence 2310 for Kili Teke in the Southern Highlands Province of Papua New Guinea was granted a Level 2A environment permit for exploration</li> </ul>	<ul style="list-style-type: none"> <li>• Two significant incidents in South Africa</li> <li>• Regulatory delays in the issuing of water use licences</li> <li>• Changing environmental legislative framework</li> <li>• In South Africa, potential implementation of carbon taxes coupled with increased cost of electricity will impact our operations' sustainability</li> </ul>

## WHY THE ENVIRONMENT IS MATERIAL TO HARMONY

We recognise that our business and business processes have, and can have, a negative effect on surrounding communities and the natural environment, and that it is our responsibility to avoid, mitigate, manage and limit these impacts. At the same time, what we do and how we do it can have a positive effect on our natural environment and communities; for example, by ensuring beneficial land use post-mining. We need to identify appropriate, sustainable opportunities for this to occur and ensure that we maximise these opportunities. In so doing, we will reduce our operating costs and exposure to risk while ensuring that we leave a lasting, positive legacy.

### Relevant material issues:

- Protecting our licence to operate
- Managing our impact
- Reducing our footprint
- Deliver lasting environmental benefits

## OUR APPROACH

Ultimate oversight for Harmony's environmental strategy and performance rests with the social and ethics committee of the board. In addition to an executive environmental manager, an environmental leadership committee drives environmental improvement strategically at group level, which cascades down to the various operations. At each operation, general managers are accountable for environmental management, and each operation develops annual environmental management plans to identify opportunities to

increase compliance and minimise pollution. To ensure legislative compliance, appropriate environmental management systems are being implemented at all operations to ensure a formal, systematic approach.

Our environmental strategy aims to optimise our environmental performance by managing our environmental impacts, focusing on effective risk controls, reducing environmental liabilities, ensuring responsible stewardship of our products within our scope of influence, complying with environmental legislation and regulations, and by creating a learning, sharing environmental culture that replicates experience from inside and outside the organisation and that shares knowledge and expertise within the group.

In South Africa, as required by the Mineral and Petroleum Resources Development Act, an environmental management programme has been drawn up for each operation, and submitted to and approved by the Department of Mineral Resources. These plans are amended when necessary and resubmitted for approval. Other key legislation includes compliance with the National Environmental Management Act, National Water Act and the National Nuclear Regulator Act.

In Papua New Guinea, we are subject to applicable environmental legislation including specific site conditions for water extraction and waste discharge attached to the mining tenements and issued by the Papua New Guinea Government Department of Environment and Conservation. In the fourth quarter of fiscal 2014, the Papua New Guinea Parliament approved the change of the Department of Environment and Conservation to the Conservation and Environment Protection Authority and this change is expected to be completed at the end of calendar year 2015. This transition period could cause potential approval delays in FY16.

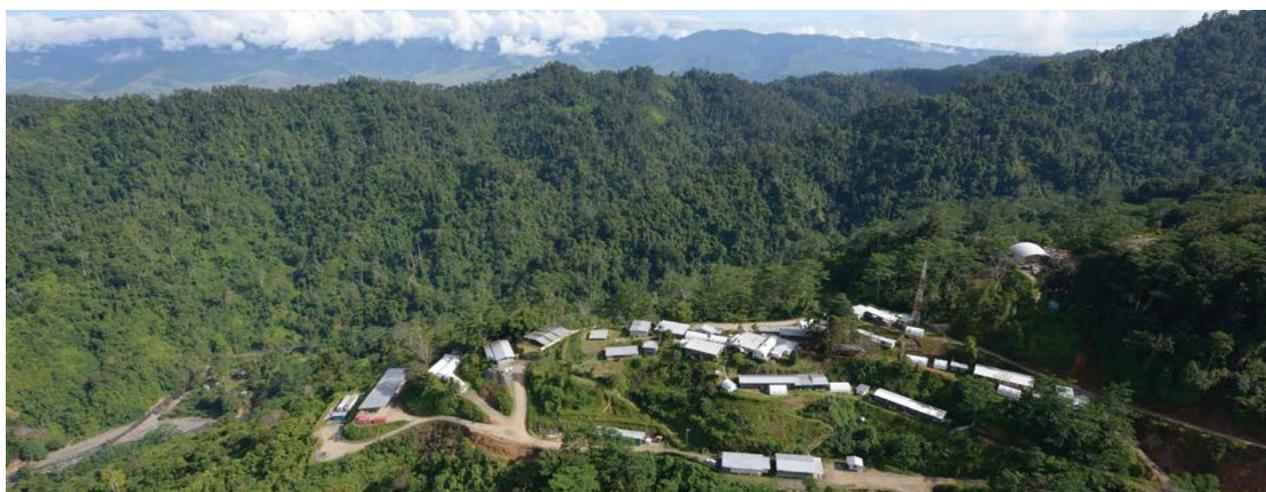
The board-approved environmental policy – [www.harmony.co.za/sustainability/environment](http://www.harmony.co.za/sustainability/environment) – supports the strategy. Further, we have developed technical and performance standards and guidelines to ensure consistency at all our managed operations, and these are incorporated into operational environmental management systems and implemented in line with the principles of ISO 14001 standardisation process.

The environmental policy sets out our commitment to ensure that mine closure is undertaken to ensure long-term environmental stability and beneficial land use post-mining that promotes sustainable livelihoods in our communities. This policy underpins our understanding of the entire life cycle of our product.

## PERFORMANCE IN FY15

By year end, seven of our long-life mining operations (accounting for 64% of FY15 production) and five of our processing facilities had been ISO 14001-certified. Our focus in FY16 will be to achieve certification of the Bambanani and Joel mines in South Africa.

As required by law, all our South African operations have approved environmental management programmes that include broad outlines of closure plans. These environmental management programmes have been approved by the Department of Mineral Resources. An amendment to Kusasaletu's environmental management plan, relating to the inclusion of aggregate production from waste rock, was approved during the year. Amendments to the environmental management plans for Kalgold, Kusasaletu and two mining rights in the Free State have been submitted.



Hidden Valley ridge camp

## ENVIRONMENTAL PERFORMANCE CONTINUED

While closure principles are included in all environmental management programmes, detailed closure plans are being developed for Masimong and Unisel. Such plans are developed once operations are within five years of planned closure.

At Kalgold, our rehabilitation strategy focuses on returning the tailings to the D-zone pit, eliminating the need for adding to the surface footprint by way of a tailings dam. All tailings throughout the life of mine can be accommodated in the pit.

In line with revised legislative requirements, integrated water-use licence applications were submitted to the authorities for each operation in 2006. Our mines continue to operate under the old order water use licences or directives. Harmony is working closely with the officials of the Department of Water and Sanitation to expedite the issuing of the outstanding new order licences.

Implementation and execution of our environmental strategy is directed by an environmental leadership committee at each operation, supported by a group-level environmental manager. General managers retain legal responsibility for our operational environmental performance as well as for compliance with our environmental management plans.

The environmental management system forms the basis for the implementation of the environmental policy and monitoring compliance, while the environmental management programme report, developed in line with legislative requirements, contains specific as well as general principles governing environmental management during the life of a mine.

All certified operations maintained their certificates during FY15. Bambanani and Joel will be certified by the end of calendar 2015.

Group-level environmental audits as well as a number of annual compliance audits were undertaken during the year, most notably by the Department of Mineral Resources. Areas of non-compliance identified by the audits have been or are being addressed.

In Papua New Guinea, we seek to reduce our environmental footprint, largely through accelerated rehabilitation. Hidden Valley's environmental management plan is aligned with the ISO 14001 management standard. An important aspect of environmental management in Papua New Guinea is the environmental awareness training provided to all new employees during induction. This is reinforced through leadership training courses and the promotion of monthly environmental awareness initiatives aimed at the workforce as a whole.

An independent environmental audit of the Hidden Valley operation was undertaken by the joint venture partners and the following corrective actions were implemented during FY15:

- improved waste management, closure and decommissioning procedures for waste and fuel oil storage areas
- development of a sediment reduction plan that focuses on source control (for example, better drainage around waste dumps and the stabilisation of exposed slopes) rather than downstream sediment traps
- discussion with the Conservation and Environment Protection Authority on how alternative and more site-specific discharge criteria for cobalt and sediment can be developed
- training of sewage treatment plant operators to ensure that consistent treatment procedures are followed, and on proper sampling procedures

In FY10, the Papua New Guinea Conservation and Environment Protection Authority commissioned a third-party compliance audit of the Hidden Valley mine to address stakeholder concerns about the sedimentation impacts of mining on the Watut River. This compliance audit led to the development and implementation of a Conservation and Environment Protection Authority-approved environmental improvement plan and, in FY11, the appointment of an external stakeholder advisory panel. For additional information on this panel, please refer to the Sustainable Development Report 2012 which can be found at [www.financialresults.co.za/2012/harmony\\_ar2012/sustainability-report/op-environment.php](http://www.financialresults.co.za/2012/harmony_ar2012/sustainability-report/op-environment.php)

By the end of December 2014, all 40 actions identified in the environmental improvement plan had been addressed and application made to the Conservation and Environment Protection Authority for the environmental improvement plan to be formally closed out. Feedback is awaited from the Conservation and Environment Protection Authority.

In terms of compliance, the Conservation and Environment Protection Authority requested that Hidden Valley apply for an amendment to the current environmental permit regarding conditions relating to turbidity and cobalt levels. Hidden Valley is preparing to apply for an amendment to its environmental permit for cobalt and turbidity as requested. Discussions with Harmony representatives have been held to ensure that the proposed amendment will address additional concerns beside cobalt and turbidity.

## ENVIRONMENTAL INCIDENTS

### Relevant Global Reporting Initiative indicators: G4-EN24, G4-EN29, G4-EN34

Our environmental management plans provide for the monitoring, reporting and remediation of environmental incidents, including the direct or indirect discharge of water beyond our mining area.

Our environmental classification system categorises incidents on a scale of 1 to 5. A level 5 incident has mitigation costs in excess of R3 million and a very significant impact on highly valued species, habitat or eco-system, potentially resulting in international condemnation and possible director liability. A level 1 incident represents low-level non-conformance, with mitigation costs of less than R100 000 and where there is limited damage to a minimal area of low impact and where any complaints are localised.

During FY15, two significant environmental incidents were reported. A level 3 incident may result in either mitigation costs of between R250 000 and R500 000 or serious medium-term environmental effects, breaches in legislation and may result in serious adverse media attention. A level 4 incident has a mitigation cost in excess of R1 million, with the possibility of significant fines or prosecutions.

### Environmental incidents in FY15

#### Relevant Global Reporting Initiative indicators: G4-EN8, G4-S08

Date	Operation	Cause
31 October 2014	Kusasaletu (level 3)	A directive was issued to Kusasaletu to stop the discharge of water being pumped from underground mine workings. With the rains, storage capacity in the return water dam was depleted resulting in some water having to be discharged under controlled conditions. Kusasaletu developed a management plan to cease the discharge and submitted this to the Department of Water Affairs, which accepted it. Water sampling showed no impact on the receiving environment.
4 March 2015	Kalgold (level 4)	Kalgold operation received an administrative fine of R200 000 for the construction of a haul road without a record of decision issued by the provincial municipality. Harmony had been operating in line with an approved environmental plan. This fine was issued during the transitional period when the National Environmental Management Act and Department of Mineral Resources legislative processes were unclear. The mining industry has historically disputed the need to apply for authorisation in terms of the National Environmental Management Act for activities ancillary or incidental to mining operations undertaken in accordance with an environmental management plan approved in terms of the Mineral and Petroleum Resources Development Act 28 of 2002.

No fines or sanctions were received during FY15 for non-compliance with environmental laws and regulations in Papua New Guinea. Furthermore, mechanisms are in place to enable stakeholders to report any grievances they might have concerning environmental impacts caused by Harmony's operations in South Africa and Papua New Guinea.



Tailings storage facility and processing plant, Hidden Valley

# ENVIRONMENTAL PERFORMANCE CONTINUED

## LIMITING AND OPTIMISING THE RESOURCES WE USE

### Relevant Global Reporting Initiative indicators: G4-EN1

The primary materials used by Harmony are: the rock we mine, the ore we process and the liquefied petroleum gas, grease, cyanide, fuels and lubricating and hydraulic oils we use.

#### Materials used

	FY15	FY14	FY13 ****	FY12	FY11
Rock mined (ore and waste) (000t)	29 948*	39 133	38 668	34 868	30 250
Ore mined (000t)	13 041	14 798	13 312	14 010	12 063
Waste rock recycled (000t)	6 647	7 058	8 008	8 191	3 200
Slimes recycled (000t)	5 987	5 933	5 358	6 955	5 236
Liquefied petroleum gas (t)	1.14	1.21	1.08	0.55	0.62
Grease (t)	54	87	61	51	22
Cyanide (000t)	14.3	14.7	8.0	11.1	8.0
Petrol and diesel (000l)	24 464	27 148 **	61 354 ***	30 135	44 788
Lubricating and hydraulic oil (000l)	2 772	3 011	3 860	2 457	2 206

\* Reduction is – in the main – due to closure of Target 3 and restructuring of Kusasalethu's production profile

\*\* Reduction in petrol and diesel consumption is as a result of closing the Kimberley Reef area at Doornkop and the decline in the consumption at Hidden Valley with the increased use of hydropower

\*\*\* Increase was predominantly due to increased usage at Hidden Valley for the period during which the overland conveyor malfunctioned

\*\*\*\* 2013 excludes Evander. Previous years not restated

#### Cyanide

Harmony is a signatory to the International Cyanide Management Code for the manufacture, transport and use of cyanide in producing gold (the Cyanide Code). This voluntary industry code was developed by the United Nations Environment Programme and the International Council on Mining and Metals. All of our major gold mining operations and most of our metallurgical plants have been certified as compliant.

- Seven of our plants are certified in terms of the Cyanide Code – the Harmony One, Central, Target, Joel, Kusasalethu, Doornkop and Hidden Valley plants
- At Kalgold, a cyanide decontamination plant is being commissioned to optimise the consumption and disposal of cyanide. We continue to implement controls to move closer to compliance, which will be followed by a review of the plant's application for certification
- The Phoenix retreatment operation (Saaiplaas plant) was voluntarily deregistered following an external audit, which confirmed that there was a problem with weak acid dissociable cyanide concentrations in the tailings. External experts have been commissioned to investigate potential solutions
- The Hidden Valley plant received its Cyanide Code compliance certificate in FY14. Harmony and Newcrest are signatories to the Cyanide Code and, since commissioning of the process plant at Hidden Valley in FY10, monitoring has shown that cyanide concentrations at the Nauti Village compliance point (as stipulated in the permit) are in line with environmental permit limits

Harmony used 14.3 kilotonnes of cyanide during FY15 (FY14: 14.7 kilotonnes). The decrease in cyanide consumption was largely due to fewer tonnes of ore being treated in 2015 (18 063 kilotonnes) as compared to 2014 (18 784 kilotonnes)

## OPTIMISING OUR ENERGY USE, REDUCING CARBON EMISSIONS

### Relevant Global Reporting Initiative indicators: G4-EN3, G4-EN5 and G4-EN6

Reducing and managing the energy we consume are fundamental business considerations and environmentally imperative. Optimising our energy use will in turn optimise our carbon emissions.

Harmony's operations consume a significant amount of electricity in the production of gold. We account for our product to the point at which it is sent for refining (by Rand Refinery in South Africa and by Perth Refinery in Western Australia).

In South Africa, almost all of the energy we consume is indirect energy, in the form of electricity purchased from the national power utility, Eskom, which is largely derived from coal-fired power stations with very little scope for the large-scale purchase of energy from renewable sources.

In Papua New Guinea, we aim to maximise our use of alternative energy sources. In 2011, Hidden Valley was connected to a new hydropower transmission line, part of the Papua New Guinea electricity grid, and the operation is now predominantly driven by a hydro-powered electricity grid. In this reporting year 83% of Hidden Valley's power consumption was generated by hydropower, an increase on the previous year (70%).

Energy consumption is a significant portion of our operating costs in South Africa (16%) but less so in Papua New Guinea (8%).

Direct and indirect energy consumption (MWh)	FY15	% of total energy used	FY14	% of total energy used
<b>South Africa</b>				
Direct <sup>1</sup>	–	–	–	–
Indirect <sup>3</sup>	<b>2 608 157</b>	100	2 756 029	100
<b>Total</b>	<b>2 608 157</b>	100	2 756 029	100
<b>Papua New Guinea</b>				
Direct <sup>1</sup>	<b>10 355</b>	17	18 354	30
Indirect <sup>2</sup>	<b>48 863</b>	83	42 060	70
<b>Total</b>	<b>59 218</b>	100	60 414	100
<b>Harmony total</b>				
Direct	<b>10 355</b>	0.39	18 354	1
Indirect	<b>2 657 020</b>	99.61	2 798 089	99
<b>Total</b>	<b>2 667 375</b>	100	2 816 443	100

<sup>1</sup> Diesel

<sup>2</sup> Renewable energy – hydropower-generated electricity

<sup>3</sup> Non-renewable – coal-fired power stations (Eskom)

Energy consumption	FY15	FY14	FY13	FY12	FY11
Intensity consumption (MWh/tonne treated)	<b>0.15</b>	0.15	0.14	0.19	0.19
Absolute consumption (MWh)	<b>2 667 375</b>	2 816 443	2 704 220	3 058 219	3 534 000
MWh	FY 15	FY14	FY13	FY12	FY11
South Africa	<b>2 608 157</b>	2 756 029	2 664 111	3 013 150	3 429 000
Papua New Guinea	<b>59 218</b>	60 414	51 414	50 312	52 508
<b>Total</b>	<b>2 667 375</b>	2 816 443	2 704 220	3 058 219	3 534 000

## ENERGY MANAGEMENT

Harmony is developing a strategic advantage in the efficient use of energy, while managing rising energy costs and reducing its emission intensity. Harmony's revised energy efficiency and climate change policy and strategy articulate our commitment to improving energy efficiency.

Our primary focus has been on making mine cooling, compressed air, water management and ventilation more efficient. In addition, we have improved solar generation capacity within the group. Together, this contributed to a decrease in power consumption and an associated decrease in our energy-use intensity factors.

By the end of FY15, 12 projects had been implemented and 19 were on-going. Once completed, these will result in a total combined annual energy saving of 64 040MWh. The energy-efficient fans installed underground at Kusasaletu as well as Tshepong's optimisation of compressed air projects are exceeding expectations in terms of energy savings. Most of the other projects are on target or slightly below target.

# ENVIRONMENTAL PERFORMANCE CONTINUED

While we will continue to optimise efficiencies within the group, our strategy will progress to enhancing our energy mix with increased use of solar, hydropower and bio-energy in the short term.

In FY15, total energy use was 2 667 375MWh (FY14: 2 816 443MWh), down by 5% with corresponding energy intensity levels of 0.15MWh/tonne treated (FY14: 0.15MWh/tonne). In all, our energy consumption has declined by 24% in the past five years and our intensity usage by 21%.

Harmony South Africa's electricity consumption decreased by 149GWh and emissions by 153 000t CO<sub>2</sub>e (FY14: 92GWh and 96 879t CO<sub>2</sub>e respectively). The electricity generated from diesel at Papua New Guinea was 10 355MWh (FY14: 18 354MWh).

Harmony's environmental strategy has been influenced by the company's drive to reduce energy consumption and greenhouse gas emissions, as well as by the need to adapt to climate change and to diversify its energy mix. Our energy management strategy is thus aligned with that of our business strategy, particularly regarding effective carbon management. Our responsible stewardship of the environment encompasses:

- Promotion of energy efficiency at our deep-level operations in South Africa
- Design and development of renewable energy driven operations in Papua New Guinea
- Optimisation and rebalancing of our asset portfolio by decommissioning operations where the marginal returns of mining payable reserves are outweighed by the rising cost of the energy to mine those reserves
- Promotion of an alternative energy mix
- Alignment of our rehabilitation programme to support the green energy agenda

Harmony emits a certain quantity of carbon given the fossil fuel (petrol/diesel) consumed in transporting people and material in the course of our business. We have embarked on a drive to optimise our fleet that includes reducing the number of vehicles in the supply chain fleet as well as their average age. This has resulted in less fuel being used by transportation services to all operations, which has in turn led to lower carbon emissions. We monitor our fuel consumption monthly, as part of a standard set of key performance indicator measurements. Reducing the average fleet age also leads to reduced emissions as there is a direct correlation between the fleet age, kilometres travelled and oil consumption, not to mention the maintenance costs involved in running an ageing fleet. In addition to these efforts, as shown in the table above, our energy source in Papua New Guinea is now 83% from hydroelectricity and 17% from diesel to reduce greenhouse gas emissions.

## Addressing climate change by optimising our energy usage

### Relevant Global Reporting Initiative indicators: G4-EC2

The company is well-placed to capitalise on climate change opportunities that involve land rehabilitation, biodiversity, energy management, carbon sequestration and solar power.

Climate change risks have influenced the design of new assets and the operation of current assets (in terms of energy efficiency and alternative energy use). Opportunities presented by climate change have been included in mine closure plans regarding post-mining land use. The climate change risks and opportunities affecting Harmony's business strategy are monitored continuously at an asset level and are communicated to the board throughout the year. The overall strategy is reviewed annually.

Those climate change aspects that have had the greatest influence on Harmony's business strategy are:

**Regulatory risks:** The major regulatory risk facing Harmony's South African operations is the proposed carbon tax. While, in the past, we have adjusted our strategy to ensure that this tax forms part of our long-term planning and have aspired to take advantage of the tax relief associated with carbon tax offsets, Harmony remains seriously concerned about the implications of rising energy costs and carbon pricing impacts on the viability of its business. Harmony, through the Chamber of Mines, is collaborating with government on the threat that the carbon tax poses to our business in the current economic climate in which we are operating.

**Energy pricing:** Deep-level mining is inherently energy-intensive. Given the impact of climate change on energy pricing, Harmony's strategy is to rebalance its portfolio towards shallower/opencast/bulk/mechanised mining operations. Harmony's portfolio in Papua New Guinea includes Hidden Valley, an opencast mine, and the Golpu project, which will be a less emissions-intensive, underground block-cave operation.

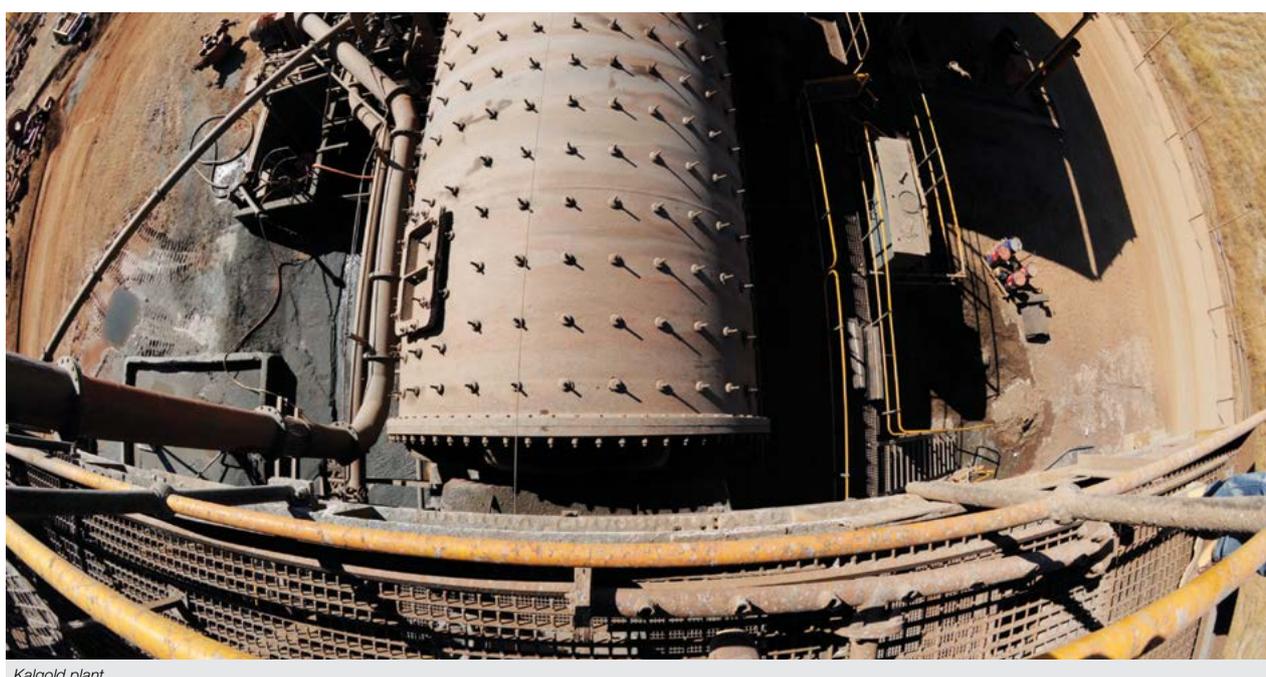
**Physical risks:** Significant climate-related physical risks facing Harmony include a change in rainfall patterns and the consequential risk of water supply. Intermittent water supply poses a threat to the operational continuity of Harmony's mines and thus has the highest impact on the profitability of the business. As such, Harmony's strategy is to ensure that no mine is affected by water constraints through the implementation of a holistic water management plan.

Harmony's short-term strategy for next five years is driven by adaptation, conservation and a move towards achieving an alternative energy mix to supply its operations. In terms of conservation, Harmony is reducing its grid-electricity consumption and greenhouse gas emissions through targeted year on year and multi-year reductions. The most recent reductions have been achieved by the implementation of a suite of energy efficiency initiatives and the closure of carbon-intensive shafts. Harmony is set to increase its use of green energy derived from hydropower, solar power and bio-mass.

Harmony's long-term strategy is based on two elements to mitigate the risk of climate change:

- **Rebalancing our asset portfolio:** In the rebalancing of our portfolio, energy-intensive operations – as one of the reasons to close a mined-out, unprofitable mine – are being closed and the focus in the long term will be on the development of lower-carbon intensity assets. This will minimise the impact of increased energy costs and our potential exposure to carbon taxes. In FY14, Steyn 2 shaft and the Doornkop Kimberley section were closed and, in FY15, Target 3 was placed on care and maintenance. Shafts decommissioned in recent years have been rehabilitated; their shaft cavities have been filled with inert material and capped to prevent, among other things, potential fugitive methane emissions. This process is now underway at Steyn 2. Our operation in Papua New Guinea has significantly lower emission intensities than its South African counterparts and has been designed for energy efficiency with a predominantly renewable energy base
- **Post-mining land use:** Several options are being considered for post-mine life land use, such as the creation of carbon sinks and the conversion of rehabilitated land to the cultivation of non-edible crops for renewable bio-energy production (the land is not suitable for food production). This will reduce the demand for coal-based electricity, thereby mitigating the effects of climate change. Non-edible crops will be planted on Harmony-owned land for the production of energy such as bio-gas and bio-char (charcoal made from the conversion of bio-mass, using heat by means of pyrolysis, into carbon in the form of a final product that is used in agriculture to improve land quality)

We have also begun engagements with our major suppliers to reduce climate change risks across the value chain. Group-level absolute and intensity-based greenhouse gas emission reduction targets have been set for the five years to FY18 (see Outlook on page 119).



Kalgold plant

# ENVIRONMENTAL PERFORMANCE CONTINUED

## NOTEWORTHY ACTION

### **SOUTH AFRICA: OPTIMISING ENERGY CONSUMPTION, REDUCING COSTS, SUPPORTING NATIONAL TARGETS**

We continue to support the South African government's energy-efficiency strategy, announced in 2005, which set a national improvement target of 12% by 2015. After the electricity crisis of 2008, when structural failures in the national grid led to a significant decrease in electricity capacity, Eskom imposed a 10% reduction in energy supply to the mining industry. We have worked closely with Eskom to manage electricity usage as part of our commitment to reduce energy consumption.

Electricity tariffs have risen steadily in South Africa since 2008 and, given electricity's relatively significant contribution to operating costs, tariff increases exceeding 8% will have an impact on the sustainability of several of our operations. Our work with Eskom to manage electricity usage includes the use of demand-side management strategies to reduce electricity consumption during peak periods. Demand-side management involves reduced energy use during periods of high demand by, for example, scheduled pumping, compressed air, cooling, hoisting and ventilation to coincide with cheaper off-peak periods, making more efficient use of Eskom tariffs that reward load shifting and load clipping, and improve the efficiency of our operations.

By the end of FY15, four demand-side management and eight Harmony-funded projects had been implemented and 17 additional initiatives were identified, and are in various stages of investigation or implementation. Together these projects, once completed, will result in a total annual energy saving of 64 040MWh. Initiatives undertaken by the operations, such as stopping compressors and main ventilation fans, are achieving the planned energy savings. Certain 'old' completed projects that were re-implemented as part of a maintenance programme have resulted in achieving the target set, others had limited success given operational challenges such as excessive water consumption. This will be rectified with the implementation of new projects to reduce water wastage and the use of compressed air in underground mines.

A further 17 energy efficiency projects are planned for FY16, some of which are Harmony initiatives while others await funding approval from Eskom. These 17 projects, if implemented, will contribute to annual savings of 82 301MWh and will be prioritised for completion in FY16.

The energy-saving initiatives planned for FY16 include:

- Bulk air cooler peak-load clipping to minimise power consumption during national peak hours at Kusasalethu
- Installation of energy-efficient ventilation fans in seven operating shafts registered as seven Demand Side Management projects
- Optimisation of ore transport from shafts to gold plants
- Load clipping project on fridge plants at Masimong
- Optimisation of compressed air use in mines using compressed air for cooling
- Optimisation of compressed air at Doornkop
- Optimisation of compressed air using stand-alone compressors at Phakisa
- Optimisation of compressed air and water use at Tshepong and Kusasalethu
- Implementation of ISO 50001
- Installation of energy-efficient motor drives

Harmony remains committed to the challenge of creating an enabling environment, and to the adequate allocation of resources to achieve our environmental goals and commitments. Dedicated staff are managing our energy-efficiency programme. The budgetary requirement for these 17 projects is R55 million and financial constraints may restrict the number of projects to be implemented during FY16.

Our aim is to maximise the use of alternative energy sources. While opportunities in South Africa are currently limited, government-led initiatives have increased the scope for alternative energy generation in the future, and Harmony wants to be at the forefront of this process (see discussion on 'South Africa: Committed to renewable energy' on page 109).

The situation in Papua New Guinea is a little different where a greenhouse gas management strategy has been developed for Harmony's joint venture Papua New Guinea operations. Here, greenhouse gas emissions are direct (Scope 1) emissions only since the main source of power is hydropower (Scope 2) which does not generate greenhouse gas emissions.

Our aim is to reduce our reliance on diesel-generated power at Hidden Valley and the amount of fuel that needs to be trucked to this remote site. Management has set a target that hydropower should make up 75% to 80% of energy used at Hidden Valley by FY16. The Hidden Valley plant, which accounts for the vast majority (about 85%) of the power consumed at this operation, is equipped with the latest technology to ensure optimal use of energy.

The Golpu project will be designed to meet environmental best practice. Environmental design criteria incorporate Papua New Guinean statutory requirements and, where applicable, Australian, World Health Organisation and International Finance Corporation (part of the World Bank Group) standards or guidelines. Prefeasibility infrastructure designs have been scoped with energy efficiency and water conservation in mind. The use of hydropower, natural gas or bio-mass for power generation is also being considered as part of the feasibility study, which is scheduled for completion by the end of the first half of FY16.

## NOTEWORTHY ACTION

### SOUTH AFRICA: COMMITTED TO RENEWABLE ENERGY

The National Energy Regulator of South Africa approved a renewable energy feed-in tariff guideline in 2009. This guideline has stimulated the development of renewable energy projects, which are becoming a more feasible investment option.

### ALTERNATIVE ENERGY SOURCES

Harmony is currently assessing various energy-generating initiatives for the land it owns in South Africa. Generation of additional power will help to alleviate current supply concerns and the cost of energy.

#### Bioenergy

Harmony is also implementing a bio-energy project involving the propagation of bio-crops on mine-impacted land in the Free State to generate natural gas as a substitute for fossil fuels in the company's Harmony One gold plant elution and carbon regeneration circuits. Phase 1 of the project aims to deliver 71 000GJ of energy with a view to producing first gas in February 2016 and aiming to ramp up to generate 187GJ within 24 months. This project aims to turn mine-impacted land to account by creating a value-adding use for it and, in so doing, promote skills development and job creation for communities and ensure a sustainable legacy in the Free State.

Following a feasibility study for the development of bio-mass capability in the Free State, implementation began in September 2014. The aim of the project is to use mine-impacted land as part of the provincial rehabilitation initiative to create economic opportunities for local communities. As part of this process, we will convert electrical and polyfuel heating of elution water at our gold plants to bio-gas heating.

Bioenergy will be produced in the Free State from Giant King Grass, sweet sorghum or sugar beet to supplement fossil energy.

#### Solar power

Harmony is building expertise in renewable energy and participating in a group that is developing a 5MW solar park at Kalgold in terms of the government's renewable energy power programme. The solar energy it generates will be fed into the Eskom electricity grid. The proposal for this project was submitted in the current round of public bidding.

Another two solar parks involving photovoltaic plants (two 10MW plants), planned for the Free State, are currently in environmental impact assessment stage. A third initiative, a 40MW plant at the African Rainbow Minerals Gold number 1 shaft, is also being investigated. All three projects will be implemented on Harmony-owned land.

#### Carbon sink

Harmony undertook a prefeasibility study to establish a bio-crop reforestation plantation on rehabilitated land in Virginia, Free State. The aim is to use the bio-crop to generate bio-char for community consumption, and to conduct trials to ascertain whether or not this crop could be planted and used on tailings dams for dust suppression and final rehabilitation as a carbon sink. With recent advances in the cultivation of Giant King Grass on affected land, and the ability of this grass to sequester carbon where it remains in the bio-mass of the grass, the project has developed into an opportunity for a carbon sink. Given the success of this project, it will be implemented as part of Harmony's rehabilitation strategy for its tailings dams. Planting is expected to begin in FY16.

#### Power-generating turbines

At Kusasalethu, three 3.1MW power-generating turbines were commissioned. These turbines are generating power from surface mine water transported underground. The targeted power generation capacity has been reduced as less water is now consumed by the mine. Commissioning of the fourth turbine has been postponed to FY16.

This energy will be fed directly into the mine grid and hence reduce Harmony's Eskom consumption. The annual cost saving is estimated at R6.1 million.

Collectively, these projects could reduce CO<sub>2</sub> emissions by 635 000t by FY16 but many of them require supplementary funding to be executed timeously. The purpose of carbon trading is to maximise financial gain from energy-saving initiatives while building our reputation as a responsible corporate citizen and environmental steward. Private-sector experts are working closely with National Treasury in South Africa to develop a carbon offsets/trading scheme. Harmony is monitoring the debate on the subject in order to identify opportunities for trading. No carbon projects have been registered yet.

# ENVIRONMENTAL PERFORMANCE CONTINUED

## Climate change and greenhouse gas emissions

Relevant Global Reporting Initiative indicators: G4-EC4, G4-EN15, G4-EN16, G4-EN17, G4-EN18 and G4-EN19

Harmony's Scope 1 and Scope 2 emissions in FY15 were 2 753 303t CO<sub>2</sub>e (FY14: 2 819 762t CO<sub>2</sub>e) with a corresponding intensity of 0.15 t CO<sub>2</sub>e/ton milled (FY14: 0.15t CO<sub>2</sub>e/ton milled). Indirect emissions, stemming largely from electricity purchased from Eskom, accounted for 98% of emissions. In FY15, in terms of Scope 1 and Scope 2, we decreased our carbon emissions by 2%, compared to an increase of 2.8% in FY14.

## GROUP CARBON EMISSIONS

Scope 1 emissions breakdown by source (CO <sub>2</sub> e tonnes)	FY15	FY14	FY13
Diesel	64 244	71 728	90 951
Explosives	1 748	2 079	2 026
Petrol	909	950	1 337
<b>Total scope 1</b>	<b>66 902</b>	<b>74 758</b>	<b>94 314</b>
Scope 1 emissions breakdown by source (%)			
Diesel	96	96	96
Explosives	3	3	3
Petrol	1	1	1
<b>Total scope 1</b>	<b>100</b>	<b>100</b>	<b>100</b>
Total scope 1, 2 and 3 emissions (CO <sub>2</sub> e tonnes)			
Scope 1	66 902	74 758	94 314
Scope 2	2 686 401	2 745 005	2 648 126
Scope 3	686 233	661 515	616 978
<b>Total</b>	<b>3 439 536</b>	<b>3 481 278</b>	<b>3 359 418</b>
Total scope 1, 2 and 3 emissions (%)			
Scope 1	2	2	3
Scope 2	78	80	79
Scope 3	20	18	18
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

## CARBON EMISSIONS INTENSITY

Scope 1 emissions intensity by source (CO <sub>2</sub> e tonnes/tonne treated)	FY15	FY14	FY13
Diesel	0.0036	0.0038	0.0051
Explosives	0.0001	0.0001	0.0002
Petrol	0.0001	0.0001	0.0001
<b>Total scope 1, 2 and 3 emissions intensity (CO<sub>2</sub>e tonnes/tonne treated)</b>			
Scope 1	0.0040	0.0040	0.0051
Scope 2	0.1490	0.1458	0.1441
Scope 3	0.0380	0.0332	0.0336
<b>Total</b>	<b>0.1910</b>	<b>0.1830</b>	<b>0.1828</b>

In FY15, our total carbon emissions decreased by 1.2% with a corresponding increase in intensity which averaged 0.191t CO<sub>2</sub>e/tonne treated. This increase was a result of the decrease in tonnes treated during the year. While total carbon emissions increased by 2.8% in FY14, our emission intensity remains steady at 0.183t CO<sub>2</sub>e/tonne treated.

## Carbon-related legislation

Following the release for public comment of a policy paper on South Africa's proposed carbon tax in FY13, Harmony raised concerns about the potential impacts of this tax on the gold industry's competitiveness. Harmony's view was that the proposed method of taxation posed a significant risk to the business as the company would not benefit from any tax relief given to the largest contributor (Eskom) to our carbon footprint. Through Harmony's participation in the National Treasury's working group and Chamber of Mines' initiatives, we have proposed that companies should be eligible for tax relief for Scope 1 and Scope 2 emissions. We have submitted written commentary in this regard, recommending that the carbon tax should be a deductible cost for corporate income taxes and that levels of support for early mover status (incentives for compliance versus penalties) are raised in line with global practice.

The South African government's initial plan to implement a carbon tax from 2015 has been delayed to 2016. Following extensive public consultation on the proposed tax in 2013, several adjustments to the policy proposal are expected, including the use of part of the revenue generated by the carbon tax to fund energy-efficiency tax incentive schemes. With the current electricity cost increase of 12.65% and further increases planned in the future already threatening the financial viability of our operations, any additional cost burden by way of carbon tax would merely exacerbate the situation. Harmony is lobbying, through the Chamber of Mines, to implement a carbon tax that is reasonable, does not destroy international competitiveness and recognises 'early movers'. In this reporting year, the Chamber of Mines – in response to the proposed carbon tax – voiced its opposition to the tax, reiterating that the "mining industry is grappling with, in some instances, significantly reduced revenue outlook". Harmony is supportive of this position.

A Climate Change Office was established in Papua New Guinea in 2010, but it is a small and under-resourced government office. This office is still developing its greenhouse gas and other data collection methodologies. In FY13, the Papua New Guinea government called for comment on its proposed final draft climate change policy. This policy was approved in FY15.

## Carbon reporting

Just prior to year end, we submitted our ninth annual response to the Carbon Disclosure Project. Results from our previous submission – released in November 2014 – indicated that we had successively improved our reporting on and our performance regarding carbon emissions. Harmony attained a score of 100% for carbon disclosure and band "A" performance for leadership in respect of energy and climate change. The Carbon Disclosure Project assesses companies' responses against two parallel scoring schemes, namely performance and disclosure. The highest scoring companies for performance and/or disclosure are recorded in the Carbon Disclosure Project Climate Performance Leadership Index and/or the Climate Disclosure Leadership Index. Harmony is the only South African company to receive platinum awards, the highest award, in the disclosure and performance categories.



*Propagation of bio-crops on mine-impacted land to generate natural gas as an alternative to fossil fuels*

# ENVIRONMENTAL PERFORMANCE CONTINUED

## NOTEWORTHY ACTION

### Engagement with suppliers and their environmental impacts

**Relevant Global Reporting Initiative indicators: G4-12, G4-EN32, G4-EN33, G4-HR11**

We manage our supply chain risk by engaging continuously with our top 50 suppliers regarding their greenhouse gas emissions and climate change strategies. In FY14 specifically, for the first time, our timber supplier calculated its product carbon footprint and shared the findings with us.

While environmental management and compliance with various environmental legislation and regulations, among others, have been included in the general conditions of contract for our suppliers, screening of suppliers has not yet been conducted. Should any suppliers be found to have contravened the legal requirements specified or to be non-compliant, our contracts with them will be suspended. To date, there have not been any suspensions, and we have not received reports of grievances against suppliers regarding adverse impacts on the environment.

Engaging with our suppliers on greenhouse gas emissions is a key component of our overall sustainability goals. Although the company already has an environmental clause in its existing supplier contracts, we will include a more specific greenhouse gas-related clause in future supplier contracts. This clause will state that all suppliers must agree to introduce a greenhouse gas reporting system for the products we purchase and to send information of their carbon footprint to Harmony every year. Working with suppliers to improve their greenhouse gas performances will help reduce our Scope 3 emissions over time.

We are engaging with our top suppliers on greenhouse gas emissions to reduce climate change risks across the value chain. Supply chain has made great strides in managing its own footprint with initiatives that have reduced its footprint by reducing fuel consumption by approximately 29% in the past five years.

In addition, Harmony is investigating the potential to produce renewable energy in the form of bio-gas. The feedstock for this bio-gas will be energy crops (bio-crops) planted on Harmony-owned impacted land. These management methods and specific activities carried out in this reporting year positions Harmony to manage the risk presented by having only one supplier of polyfuel currently. The bio-gas project forms part of our risk management strategy to reduce our energy consumption and our dependency on energy generated by non-renewable sources.

## OPTIMISING WATER USE, LIMITING OUR IMPACTS

**Relevant Global Reporting Initiative indicators: G4-EN8, G4-EN9 and G4-EN10**

Significant amounts of water are used in the development and growth of our assets. Access to this resource is crucial, especially in South Africa where water is becoming a scarce resource. The risks associated with the limited availability of water in the country are high and intermittent water supplies pose a significant threat to the operational continuity of our mines and the profitability of our business. In FY13, a strategy to reduce dependency on existing groundwater infrastructure was implemented and a group-wide campaign to re-use processed water was initiated.

The holding capacities of the water dams at Kusasalethu have been upgraded. This involved desilting of these dams and enhanced pumping capabilities, on surface and underground, to enable them to cope with the greater volumes.

At Kalgold, a comprehensive geohydrological assessment informed a revision of the water balance. Technical changes were implemented at the plant and tailings storage facilities to maximise recovery of water for re-use. Similar work regarding capacity management as well as water efficiency has been completed at Doornkop.

Our South African operations do not draw water directly from surface sources, except for Kalgold which draws water from an aquifer. Our other operations source water from bulk water service providers and municipalities, surface water run-off, water that enters underground mining operations and is pumped to the surface, recycled water and boreholes.

Water use	Measured	FY15	FY14	FY13*	FY12	FY11
Water used for primary activities	000m <sup>3</sup>	<b>14 614</b>	16 495	18 556	38 011	36 671
Potable water from external sources	000m <sup>3</sup>	<b>11 993</b>	13 139	15 610	15 519	14 509
Non-potable water from external sources	000m <sup>3</sup>	<b>2 620</b>	3 355	2 946	22 492	22 163
Surface water used	000m <sup>3</sup>	<b>776</b>	1037	1 230	1 023	1 601
Groundwater used	000m <sup>3</sup>	<b>1 844</b>	1 550	1 716	21 469	22 096
Water recycled in process	000m <sup>3</sup>	<b>38 338</b>	24 531	27 593	38 337	8 266
Percentage of water recycled	%	<b>72</b>	61	60	50	18

\* FY13 excludes Evander and therefore some reductions occurred from the previous year

Water use for primary activities	Measured	FY15	FY14	FY13	FY12	FY11
Intensity consumption	000m <sup>3</sup> /tonne treated	<b>0.81</b>	0.88	1.01	2.09	1.99
Water used for primary activities	000m <sup>3</sup>	<b>14 614</b>	16 495	18 556	38 011	36 671

The total amount of water used for primary activities declined in FY15 to 14 613 602 m<sup>3</sup> with the intensity of 0.81 m<sup>3</sup>/tonne treated (2014: 16 495 284m<sup>3</sup>, and intensity of 0.88m<sup>3</sup>/tonne treated). Harmony has adopted a group-wide campaign to re-use process water in order to reduce our dependency on existing groundwater. In particular, our long-term targets are to reduce the amount of water used for primary activities by 4.5%, while increasing the amount of water recycled by 5% – thereby improving our water-use efficiency as measured by the volume of water used per tonne treated. These targets are set to be reached in FY18.

The following drought-risk mitigation initiatives continued in FY15:

- Deposition of tailings into the pit enhances recovery of water for re-use in the processing activities at Kalgold
- Commissioning of a water treatment plant at Doornkop and Kusasaletu to encourage recycling and reduce dependency on potable sources
- Implementation of process changes to improve water efficiency
- Optimisation of water separation and recycling systems
- Construction of larger return water dams and installation of large covered tanks to reduce evaporation

At Hidden Valley in Papua New Guinea, the topography together with the high levels of rainfall and low levels of evaporation pose significant water management challenges. Two main water management techniques in use are:

- controlled run-off of rainfall to prevent erosion and sediment entering the river system
- conservation of site-water used to limit the volumes of treated waste water discharged into the river system

Most of the raw water required for operations at Hidden Valley is drawn from the Pihema Creek and used for key processes in the processing plant and related ore-processing activities. Although process water recycling is prioritised, the high rainfall and low evaporation typical in this tropical environment creates a positive water balance. These conditions, together with the requirement to minimise water storage in the tailings storage facility, cause a high rate of water discharge to the environment. Minimising raw-water use is also essential to protect the mine during occasional droughts when the availability of river water can be greatly reduced.

The Hidden Valley operation treats all water to prescribed standards before it is discharged into the environment and the joint venture partners continuously monitor and manage the environmental impact of the mine on the Watut River system. River impact studies are integral to Hidden Valley's overall environmental monitoring programme. The environment and mine operational teams at Hidden Valley meet on a quarterly basis with representatives of Harmony and Newcrest Mining Limited, to review efforts to improve waste dump design, the compliance status of the tailings storage facility and water discharge results. Quality assurance/control programmes have been implemented to monitor construction of the waste dump and tailings storage facility. This programme included an assessment of the adequacy of sediment and run-off control measures. A significant improvement in waste dump design/build and tailings management is being achieved.

Furthermore, progress was made in reducing the discharge of mine-related sediment into the Watut River. There is scheduled monitoring of water quality, water extraction and discharges to ensure compliance with permit parameters. Lime dosing has continued

# ENVIRONMENTAL PERFORMANCE CONTINUED

at the Watut River to control acidity and dissolved metal levels. At the sewage treatment plant, new blowers and more frequent operator training have contributed to improved compliance with permitted discharge criteria. The outcomes and recommendations of the various monitoring reports have been used to inform management's environmental management plans.

## Acid mine drainage

Acid mine drainage is the occurrence of highly acidic water, usually containing high concentrations of metals, sulphides and salts as a consequence of mining activity. Major sources of acid mine drainage include drainage from underground mine shafts, run-off and discharge from open pits and mine waste dumps, tailings and ore stockpiles. Tailings and ore stockpiles make up nearly 88% of all waste produced in South Africa.

We manage fissure water at all of our operations. When there is a risk that rising water levels underground could either hinder access to our own ore reserves, those of other operations or harm the environment, water is pumped to surface. Our water management strategy includes intercepting this water before it is polluted underground. When brought to surface, it is consumed as plant intake. As the mines in the Witwatersrand Basin are interconnected, any tactical response to acid mine drainage on mine closure must be considered from a regional perspective. We continue to work closely with our regional partners to identify the long-term risks of acid mine drainage and to establish sustainable solutions.

In 2012 and 2013, geohydrological assessments were undertaken in the Free State region, Kalgold and Doornkop. With regard to acid mine drainage, the studies confirmed that there was no risk of decant from the Free State operations or Kalgold. From the perspective of surface water pollution, rehabilitation has been prioritised at the joint metallurgical scheme site and the acid plant site in the Free State, and at the decommissioned shafts and infrastructure in the Free State and at Kusasaletu.

Water is being discharged from our Doornkop operation under directive and is in the licensing process. Based on the draft licence received, Doornkop is able to comply with its licensing conditions. An intensive water-monitoring programme is in place and reporting to the regulator takes place routinely.

In Papua New Guinea, the issue is with acid rock drainage (which is the same as acid mine drainage) as a result of waste rock dumps. Environmental impacts are mitigated by the construction of engineered waste dumps and controlled placement of potentially acid-forming waste rock. When required, lime is added to the process-water discharge to maintain natural levels of alkalinity at the compliance point. Water sampling and studies continue to improve our understanding of acid rock drainage impacts, and enable us to formulate plans for longer-term reduction and mitigation.

## LAND MANAGEMENT AND ENVIRONMENTAL CONSERVATION

We recognise that we are custodians of the land we affect and manage. While some aspects of our operations – particularly open-pit mining, waste and tailings deposition and the construction of physical structures – entail altering the physical landscape permanently, we believe that, once mining has come to an end, it is important to rehabilitate the land to effective and appropriate post-mining land use. Rehabilitation and closure have, therefore, been incorporated into overall planning from concept stage for new operations and during the life of mine for existing operations. This includes ensuring that the necessary funding mechanisms are in place. Continuous efforts are made to identify land for rehabilitation and, where feasible, we refurbish infrastructure for use by local communities.

### Biodiversity, land management and conservation

**Relevant Global Reporting Initiative indicators: G4-EN12, G4-EN14, G4-EN31, MM1, MM2**

Harmony has strategies in place to manage the impacts of our operations on biodiversity. Environmental rehabilitation activities to restore the habitat for native species are on-going.

Biodiversity management plans are implemented at all sites, either through their respective mine closure plans, environmental management plans or specific biodiversity action plans – whichever is the most appropriate. Biodiversity action plans involve the protection and conservation of indigenous plants as well as the planned, progressive removal of alien and invasive plant species. In addition, in the Free State, a nursery has been established on rehabilitated ground to cultivate indigenous species to be used to repopulate affected or remediated land. Harmony has approximately 65 000ha of land under management in mining rights and disturbed areas that are under rehabilitation. None of our producing operations are in areas of high biodiversity value, inside or outside protected areas, and only one of our operational areas affects listed International Union for Conservation of Nature Red Data species (see page 115).

The following conservation projects are underway in the Free State:

- **Avianator programme:** This is a partnership with BirdLife South Africa. We provided the financial resources to design the curriculum and the funds for its implementation while BirdLife South Africa presented the course.

The course teaches young people about the value of birds and of their respective habitats. Additional curriculum resources are provided to the teachers together with training and monitoring modules to ensure success of the project. Since its inception in 2013, Harmony's donation enabled BirdLife South Africa to assist 10 underprivileged schools during FY15 to improve the teachers' skills in teaching the children about birds and their habitats. Through Harmony's support the programme has expanded to include an additional seven schools in Thabong, a township on the outskirts of Welkom

- **Flamingo conservation project:** Harmony has entered into a memorandum of understanding with BirdLife South Africa to design conservation measures for the Lesser Flamingo in the Welkom district. Subsequently the partnership with BirdLife South Africa has grown, by undertaking a project to determine the suitability of the identified sites to build a breeding island for flamingos. Various community engagements will be undertaken to garner support for the project, which can not only benefit conservation of the flamingo, but can also promote tourism and possibly employment in the region identified

Although Hidden Valley is not located in a biodiversity-protected area, five species on the International Union for Conservation of Nature Red Data List occur in the vicinity of the mine. There is no evidence that the mine has affected this critical habitat. These five species include the vulnerable tree kangaroo (*Dendrolagus dorianus*), an endangered species of tree kangaroo (*Dendrolagus goodfellowi*), the vulnerable nectar bat (*Syconycteris hobbit*), the vulnerable harpy eagle (*Harpypsopsis novaeguineae*) and the critically endangered long-beaked echidna (*Zaglossus bruijnii*).

## NOTEWORTHY ACTION

### LAND MANAGEMENT AND RADIATION

Radiation has a health impact – a result of ingestion or prolonged exposure – and an environmental impact, given its extreme longevity and ability to sterilise affected areas. Licensing that demonstrates responsibility with regard to health, safety and environmental perspectives is required for each site from the National Nuclear Regulator. Site-specific gamma energy surveys are conducted at the decommissioned sites. Land clearance surveys are conducted on all land released into the public domain. Public safety assessments are being updated and will be submitted to the National Nuclear Regulator by March 2016. These assessments are based on specialist studies of human behaviour, as well as the quality of air and groundwater.

Although radiation presents a low-level risk at our mining operations, it is nevertheless effectively planned for and managed. Spills are reported to the regulators and cleaned up, and close-out reports are then submitted to the National Nuclear Regulator. Access control and signage is in place around process water dams and tailings dams to warn members of the public not to enter these areas.

In 2009, Harmony implemented a radiation quality management system, which complies fully with the requirements of the National Nuclear Regulator and, because it is ISO 9001-based, it requires continuous inspection. The quality systems audit conducted in 2015 confirmed that Harmony was 100% compliant regarding its management system for the third consecutive year.

Surface radiation is managed by reducing the extent of affected areas, especially at legacy sites, in line with legal compliance, and by reducing our environmental liabilities. Radiological clearance surveys are conducted at decommissioned sites. Radiological clearance reports are compiled and submitted to the National Nuclear Regulator to ensure the future declassification of these areas. A closure report for the area surrounding Eland shaft has been submitted to the National Nuclear Regulator.

Rehabilitation has been prioritised at the joint metallurgical services site in the Free State. Rehabilitation is also paramount at the decommissioned shafts in the Free State and at Kusasaletu's Deelkraal section.

Harmony's proposed rehabilitation methodology – which includes the use of phytoremediation – is supported by the Department of Mineral Resources and the National Nuclear Regulator. Phytoremediation involves the use of certain plants (these have been tested) to absorb radioactivity and our pollution sources from the ground into the plant structure. The harvested plants are disposed of at the tailings dam where the uranium and pollutants are consolidated. In this way, the pollution is removed without harm or wastage of the topsoil. Phytoremediation is more environment-friendly than traditional radiation rehabilitation methodologies, which require the removal of large volumes of topsoil and sub-soils, and create large cavities and further environmental deterioration. Phytoremediation has been used successfully in the Chernobyl area in the Ukraine.

# ENVIRONMENTAL PERFORMANCE CONTINUED

## Rehabilitation and closure

Land management (ha)	Mining right area	Land disturbed to date	Land rehabilitated in FY15
Kalgold	991	484	0
Kusasaletu and Deelkraal	5 605	302	5
Doornkop	905	296	0
African Rainbow Minerals Gold shafts (1, 2, 3, 4, 6 and 7)	5 980	351	4
Joel (1 and 2)	2 162	253	0
Target (1, 2 and 3)	4 327	257	0
President Steyn South (Steyn 1, 2 and plant)	1 847	57	5
President Steyn North (Steyn 7 and 9)	1 651	193	0
Virginia, Masimong, Saaiplaas, Unisel, Merriespruit, Harmony and Brand	22 583	3 349	1
Bambanani, Joint Metallurgical Services, Harmony One plant	2 356	1 346	66
Eland, Kudu, Sable, Nyala, Tshepong, Phakisa, Western Holdings 5	10 799	1 580	0
St. Helena 2, 4, and 8	4 912	446	0
St. Helena 10	944	8	0
Papua New Guinea	4 098	533	3
<b>Total</b>	<b>69 160</b>	<b>9454</b>	<b>83</b>

Only a small proportion of the land (15%) we manage has been disturbed by mining. Given that much of the affected land is in use, the opportunities for progressive and concurrent rehabilitation are limited. In FY15, the total rehabilitation liability for our South African operations was R2.21 billion (FY14: R2.2 billion). Harmony's rehabilitation liabilities are fully funded in advance by means of trust funds, insurance guarantees and bank guarantees.

Rehabilitation of our decommissioned operations in the Free State and at Kusasaletu's Deelkraal section in Gauteng province started in FY10 with the aim of reducing our environmental liabilities, eliminating potential safety and health exposures, and working with provincial authorities to meet socio-economic imperatives. Sites which have been demolished during the course of this year include African Rainbow Minerals Gold 4 shaft, Brand 3 shaft and Brand Main Office complex, Harmony 1 ventilation shaft, continued demolition of the decommissioned Steyn gold plant and finalisation of the Deelkraal shaft. In addition Harmony's bio-energy project in the Free State province has also assisted in reducing the environmental liability. Areas currently being demolished include Steyn gold plant, Saaiplaas 3 shaft, St Helena 4 hostel, St Helena 8 and 10 shafts and Brand 5 shaft.

The total number of shafts demolished to date is 32 (including ventilation shafts with many defunct workshops and hostels also having been demolished).

During the year, while rehabilitating the Brand 1A shaft near Welkom in the Free State province, an explosion took place which caused damaged to local houses and businesses. No one was seriously injured as a result of the accident. For more information, please refer to page 64 in the Safety and Health section of this report.

This rehabilitation programme reduced our closure liability by R21 million in FY15 and provided employment for at least 100 local residents in FY15.

In Papua New Guinea, land clearing for mining and processing operations is closely managed by permits issued by the environment and community affairs departments. The high altitude and extremely rugged terrain and heavy rainfall result in very high levels of surface water run-off, which makes it extremely challenging to rehabilitate cleared surfaces. In addition, Hidden Valley and Golpu are in a geologically active zone and experience frequent earthquakes and landslides. Steep surface rehabilitation is a dangerous and high-risk activity. Staff are specially trained and use special equipment to rehabilitate steep slopes.

The joint venture partners have compiled a template and guide for the preparation of a closure plan and the associated costs, which was completed in the fourth quarter of FY15. Site personnel will prepare a revised closure cost, using this guide, and submit the closure plan and costs to the owners and a third-party auditor for review and agreement. Operational staff will play a greater role in the preparation of the revised closure plan and associated cost estimate.

## MANAGING OUR EFFLUENTS AND WASTE

### Relevant Global Reporting Initiative indicators: G4-EN22, G4-EN23, G4-EN24 and MM3

Harmony's mining and processing operations generate mineral and non-mineral waste. The effective management of waste is a priority as this can reduce our environmental impacts and mitigate our environmental liabilities. We understand the actual cost of waste management, and this assists us in planning for new projects and mine closure. As part of this process, we maximise recycling and waste reduction during the life of a mine and design for waste minimisation and mineral waste reclamation (such as waste rock from dumps as aggregate) so as to minimise our total mining environmental footprint.

Internally developed mineral, non-mineral and hazardous waste materials guidelines are included in the environmental management systems which are implemented at all of Harmony's operations. At Harmony, we understand that waste management begins with waste's initial generation and encompasses its handling, storage and transport as well as its recycling, treatment and/or disposal.

Our primary sources of mineral and non-mineral waste are:

- The tailings accumulated in tailings storage facilities, which may be active or dormant. These facilities are large areas usually located in a natural hollow, valley or an embankment used to provide safe, permanent storage of tailings material. In the tailings storage facilities, the finely ground rock and water that together make up tailings will separate. About 35% of tailings are solids that will settle. The balance is water that accumulates on the surface to form a tailings pond. Tailings ponds provide an important water source for mine operations. Tailings water is usually pumped back to the mill to be re-used in the milling process. Tailings consist of overburden rock which is made up of soil, gravel and other loose materials that cover the surface of a mine site, ore which is rock that contains high concentrations of minerals such as gold, molybdenum and silver and mine rock which is solid material removed from an open pit. The design and management of tailings storage facilities are subject to rigorous regulation and are factored into our environmental management plans. A large number of our dormant tailings storage facilities were acquired as part of various transactions by Harmony over many years, and were not necessarily established by Harmony
- Material accumulated in waste rock dumps. Overburden or waste rocks are both a product of drilling and blasting, and are transported to these dumps. The waste rock dumps are man-made surface dumps located near a mine, where development rock which does not contain valuable minerals and which had to be removed from the mine has been deposited. Waste rock dumps may be re-used as construction material, subject to the approval of the National Nuclear Regulator – this approval is necessary specifically for road construction
- Scrap steel – this steel has been reclaimed in the rehabilitation exercise being undertaken at the shafts which have been decommissioned in the Free State and at Deelkraal. Decontaminated steel is sold for recycling to scrap dealers authorised by the National Nuclear Regulator and in accordance with its procedures regarding decontamination, the monitoring of radioactivity and the final release of the material
- Scrap timber – this originates from timber that has been in use as support in the underground stopes. All timber supplied to Harmony is certified by the Forest Stewardship Council which assures forest rotation in South Africa. As part of our bio-energy programme, we will be looking into introducing the timber and wood chips into our bio-energy plant

(000t)	FY15	FY14	FY13	FY12	FY11 <sup>1</sup>
Accumulated tailings in tailings storage facilities (active and dormant)	1 400 273	1 382 178	1 359 770	1 433 760	6 039
Accumulated waste rock dumps	196 692	190 128	169 115	165 085 <sup>2</sup>	82 751
Scrap steel	4.996	4.919	5.583	10.355 <sup>2</sup>	8.973

<sup>1</sup> Data for FY11 for Papua New Guinea only

<sup>2</sup> New reporting indicator for South Africa from FY12, FY13 onwards with consolidated group data being reported

### Mineral waste

Tailings are made up of crushed rock and process water emitted from the gold elution process in the form of a slurry once the gold has been extracted. The composition, size and consistency of tailings vary by operation, with the opencast operations producing greater volumes of tailings in general than the underground operations. Tailings and waste rock are usually inert, but rock close to the ore body may be associated with radiation or salts if these are characteristic of the ore body.

Since tailings do contain impurities or pollutants, in terms of our water management programme, they are placed on an engineered tailings dam to contain the slime. The fines are also collected and deposited on the tailings. Water is collected from the toe drains and penstocks and is channelled to the return water dam where it is available to be re-used by the plant.

# ENVIRONMENTAL PERFORMANCE CONTINUED

In the process, the cyanide present is destroyed – it self-destructs on the tailings when exposed to light – but salts and heavy metals can enter into ground water and create a pollution plume. We monitor our groundwater to ensure that such pollution plumes are contained. The public safety assessments have illustrated that such plumes (radionuclide contaminant plumes) will in all likelihood be contained in the tailings storage or water management facilities for hundreds to thousands of years and that the potential polluted plumes originating from the tailings storage facilities will only travel between 10m and 100m from these facilities in a 10 000-year period.

Effective mineral waste management not only reduces the aesthetic and land use challenges of mining, particularly during closure, but also reduces the potential for water and air pollution as well as maximising the recovery of ore, minerals and metals. Improved mineral waste management can result in significant savings and a reduction in energy consumption. Residual economic value can be generated from projects such as our Phoenix reclamation initiative.

Mineral waste has a significant impact on land. At Harmony, all chemically reactive or radioactive waste is appropriately handled so as to protect employees, communities and the environment.

Harmony manages the environmental impacts of mineral waste by:

- Minimising the quantity of material stored so as to limit the extent of the footprint of land disturbed
- Ensuring storage sites are physically and chemically safe, and well-engineered
- Undertaking progressive rehabilitation – returning affected land to productive use after mining

In Papua New Guinea a waste rock management plan, including acid rock drainage management strategies, was submitted to the Conservation and Environment Protection Authority for review and approval.

Hidden Valley's advanced waste management systems have generated positive feedback from stakeholders particularly the tailings storage facility which is the first large tailings storage facility to be operated successfully in Papua New Guinea. The review of the laws relating to management and disposal of tailings is now on an indefinite hold and the regulatory focus of the Mining Policy and Geohazard Department is on completing the revised Mining Policy, Act and related new regulations approved in 2015.

In FY15, 24.7Mt of mineral waste were generated from gold production (FY14: 33.5Mt), comprising 6.6Mt of waste rock and 18.1Mt of tailings (FY14: 12.8Mt waste; 20.7Mt tailings).

## Non-mineral waste

Non-mineral waste – such as plastics, steel, paper and timber – is generated by processing operations and is produced in smaller volumes than mineral waste. This waste is managed by recycling, off-site treatments, disposal or on-site landfills. The impacts of non-mineral waste can be reduced by recycling and re-using where possible. Harmony ensures the responsible storage, treatment and disposal of non-mineral waste.

Group environmental standards for non-mineral waste management have been rolled out throughout the group and are currently being integrated into existing ISO 14001 systems.

In FY15, 9 059 tonnes of waste (plastic, steel, wood and paper) were recycled (FY14: 7 892 tonnes), generating R5.2 million (FY14: R8.3 million).

## ENVIRONMENTAL PROTECTION EXPENDITURE AND INVESTMENT

### Relevant Global Reporting Initiative indicators: G4-EN22

Total expenditure by Harmony on its environmental portfolio in FY15 was R64 million, of which R34 million was spent in South Africa and R30 million in Papua New Guinea (FY14: R68 million, R34 million in South Africa and R34 million in Papua New Guinea). The total FY16 operational budget for the environment in Hidden Valley is R30 million (US\$2.6million) (PNGK6 981 048). In addition, R30 million (US\$2.6million) has been committed to the implementation of the bio-energy initiative over the next two years.

## OUTLOOK

We continue to pursue our five-year environmental objectives:

Group aggregate targets FY14 – FY18	Baseline	Performance	
		FY15	FY14
<b>Baseline FY13</b>			
• Reduce amount of water used for primary activities (intensity and absolute) by 4.5%	Absolute: 18 556ML Intensity: 1.01m <sup>3</sup> /t	Absolute: 14 614ML Intensity: 0.81m <sup>3</sup> /t	Absolute: 16 495ML Intensity: 0.88m <sup>3</sup> /t
• Total environmental legal compliance	0 fines	1 fine	0 fines
• Improve on percentage of water recycled (intensity and absolute) by 5%	60%	72%	60%
• Implementation of 80% of biodiversity action plans	All operations have biodiversity action plans	All operations have biodiversity action plans	All operations have biodiversity action plans
• Reduce land available for rehabilitation by 2%	9 948ha	9 454ha	9 416ha
<b>Baseline FY08</b>			
• Reduce absolute electricity consumption by 3%	4 422 000MWh	2 667 375MWh	2 816 443MWh
• Reduce intensity of electricity consumption (MWh/t treated) by 2%	0.35MWh/t	0.15MWh/t	0.15MWh/t
• Reduce total carbon emissions by 3%	5 343 000t CO <sub>2</sub> e	3 439 536t CO <sub>2</sub> e	3 481 278t CO <sub>2</sub> e
• Reduce carbon emission intensity (CO <sub>2</sub> /t treated) by 2%	0.3t CO <sub>2</sub> e/t	0.19t CO <sub>2</sub> e/t	0.18t CO <sub>2</sub> e/t



Solar geysers in Slovoville near Doornkop

# OPERATIONAL PERFORMANCE

Achievements	Challenges
<ul style="list-style-type: none"> <li>• Measured in terms of fatalities, best safety performance recorded in 14 years</li> <li>• Bambanani currently the lowest cost underground mine with an all-in sustaining cost of less than US\$800/oz for FY15, with the highest underground recovered grade in South Africa of 12.70g/t</li> <li>• Kusasaletu successfully restructured to ensure its return to profitability</li> <li>• Productivity for our South African operations improved by 8% for in-service employees and contractors to 43.6 tonnes per individual in FY15 (FY14: 40.3)</li> <li>• Underground grade stable at 4.75g/t for the year</li> </ul>	<ul style="list-style-type: none"> <li>• To increase margins in lower gold price environment through on-going operational restructuring</li> <li>• Balancing union wage demands with a call to preserve jobs and ensuring the sustainability of our business</li> <li>• Improving mining discipline</li> <li>• Improving delivery in line with operational targets</li> <li>• To further improve productivity</li> <li>• Keeping pace with an inflationary environment</li> <li>• Improving Hidden Valley's performance to increase profitability and extend the mine's life</li> </ul>

## WHY OUR OPERATIONAL PERFORMANCE IS MATERIAL

Gold mining and gold production are central to Harmony's existence. Maintaining and growing our margins as efficiently as we can is essential to sustaining our business and meeting our strategic objectives. This includes delivering safely on our operational plans, reducing costs, improving productivity and maximising revenue.

Our approach takes into consideration the long-term sustainability of the company as a whole. In the current environment of high-cost inflation and lower gold prices, we aim to mine those areas which will return cash flow sooner and to delay major capital expenditure (although not at the expense of safety or future viability).

By sustaining the company as a whole, we are able to pay salaries and wages to the people we employ, taxes to the national fiscus and dividends to our shareholders, to continue to be an effective and responsible custodian of the environment and to give back to the communities in which we operate.

The revenue we generate and ultimately the profit we make are determined by the price received for the gold we sell, and this is determined principally by the prevailing gold price measured in US dollars on world markets. Furthermore, the prices received in our operational and functional currencies – the South Africa rand and the Papua New Guinea kina which affect 91% and 9% of our production respectively – are governed by the prevailing exchange rates in terms of the US dollar. The kina is our functional currency in Papua New Guinea and these values are in turn converted into rands, Harmony's presentation currency.

We are price takers and have no influence on the gold price or exchange rates. However, in most cases the effect of a lower US dollar gold price is mitigated by a decline in the exchange rate of the rand and/or kina versus the US dollar, which increases the rand price and/or kina price received per ounce of gold. The contra-cyclical behaviour of the US dollar price of gold and the rand-US dollar and kina-US dollar exchange rate often work to our advantage.

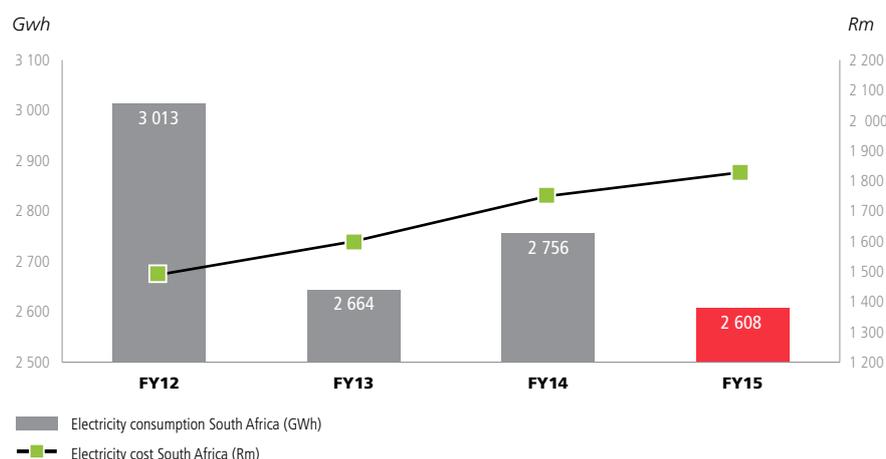
In line with our strategy to increase our margins, Target 3 was closed in October 2014 and Kusasaletu, Doornkop, Masimong and Hidden Valley were all restructured to return these mines to profitability.

Gold production was 8% lower year on year at 1.08Moz, due largely to the closure of the unprofitable Target 3 operation and a significant reduction in gold production at Kusasaletu and Hidden Valley during the year.

Inflationary pressures continue to weigh heavily on our margins and during the year we persisted with efforts to reduce costs and restructure our operations for profitability. Despite increases, especially in power and labour costs, cash operating costs in rand terms increased by just 3% year on year (7% decrease in US dollars). Owing to the reduction in gold production, however, cash operating costs increased by 12% in terms of rands per kilogram and by 1.5% in terms of US dollars per ounce.

The graph below illustrates our success to date with regard to fighting inflationary electricity price increases. Although Eskom has imposed an 81% cumulative price increase since FY12, we have saved 13% on power usage in the past four years, which, combined with improved scheduling of consumption, has limited the increase in Harmony's electricity costs to 23%.

### Electricity consumption vs cost



Our people are our biggest asset and maintaining good employee relations is essential to the sustainability of our company. Our focus is on creating an environment in which our employees can strive, be efficient and productive. Various wellness and communication initiatives are embedded in our culture. For more detailed information on engagement with our employees and their performance, please refer to the Employees and Communities section in this report on page 78, as well as the Health and Safety section on page 65.

## FINANCIAL PERFORMANCE

Our focus is on producing profitable ounces, safely. Although some operations managed to achieve their plans, under-performance at some of our biggest mines – such as Kusasaletu, Doornkop and Hidden Valley – resulted in our overall production results for the year being very disappointing.

The average US dollar gold price received in FY15 was US\$1 222/oz compared with US\$1 299/oz in FY14, a decline of 6%. During FY15 the rand weakened 11% against the US dollar, from R10.35 in FY14 to R11.45, resulting in a 4% increase in the rand gold price received from R432 165/kg to R449 570/kg.

At year-end, our all-in sustaining cost was R458 626/kg, compared with R413 433/kg in FY14, while the all-in sustaining cost in US dollar terms remained stable at US\$1 246/oz year on year.

Our translated costs in US dollars are very sensitive to the exchange rate of the rand and other currencies in terms of the US dollar. The primary reason for the cost remaining stable in US dollar terms is the weakening of the rand against the US dollar in FY15. Amounts are translated from rands to US dollars at an average of R11.45 for FY15 (FY14: R10.35 and FY13: R8.82).

## MAJOR CHALLENGES

The major challenges faced during the year and their respective mitigation plans were:

- Safety:** Safety is Harmony's key priority. Our various safety initiatives – see page 61 – assisted in reducing the number of accidents at all of our mines. Regrettably, we did have nine fatalities (FY14: 22 fatalities) at our operations during FY15. The fatalities, together with the Section 54/55 notices issued by the Department of Mineral Resources to stop operations until they were declared safe, resulted in an estimated production loss of 588kg (18 905oz). We had seven underground fires during the year (four fires at Kusasaletu, two at Masimong and one at Doornkop), with no loss of life or serious reportable incident – proof that our employees are more safety conscious. We lost about 200kg (6 430oz) in total during the year due to stoppages as a result of fires. For more detailed information on our safety performance, please refer to the section on Health and Safety (page 58) in this report.
- Infrastructure and equipment failure:** Infrastructure and equipment maintenance remains a daily focus at all our mines. The majority of the infrastructure problems experienced at Kusasaletu in FY14 were resolved during FY15. At the South African mines the senior engineering capacity, safety management and operational risk management were enhanced.

## OPERATIONAL PERFORMANCE CONTINUED

- **Managing operational risks:** While the management of operational risks is integral to the management of our business, we need to improve our execution. Gold mining is a value chain that can only be optimised if a risk management plan is in place and all supporting systems are functioning efficiently. Managing risks effectively while working safely and being pro-active are core to our success. Safety hazards and operational business risks are identified and dealt with continuously at each of our operations.
- **Achieving our operational plans:** Bambanani achieved its FY15 plan while Tshepong, Target 1, Joel, Phakisa, Unisel, Phoenix, Kalgold and surface sources came closer to achieving their plans for FY15. In preparing our plans for FY16, our emphasis was on matching the capital and human resources required with the production profile and profitability. We also plan for year on year improvements by removing bottlenecks, optimising development and being profitable.
- **Increasing recovered grades** remains a key objective. The closure of loss-making mining sections at Kusasalethu will have a positive effect on the overall grade in FY16. The average underground grade recovered for the year remained stable at 4.75g/t compared to 4.77g/t in FY14.
- **Productivity:** Enhancing productivity of our workforce has involved its restructuring and streamlining. A more pro-active approach to healthcare has assisted in reducing the high levels of absenteeism and sick leave taken from 8.90% to 8.05%. Healthcare is decentralised and therefore employees have access to primary healthcare services on site (health hubs). As high blood pressure is one of our most serious healthcare concerns, the localised health hubs enable us to better monitor employee health and treatment programmes. This too has contributed to improved health levels and less absenteeism. For more information, please refer to the section on Safety and Health on page 65.

The benefits of a healthier workforce are reflected in improved productivity rates at year-end, with overall productivity per in-service employee including contractors of 43.6 tonnes per individual (FY14: 40.3). Harmony's underground productivity figures regressed slightly, from 91.49g/total employee per month costed in FY14 to 89.1g/total employee per month costed for FY15. Productivity at Hidden Valley in Papua New Guinea was reported at 228g/total employee costed (FY14: 277g/total employee costed).

Employees qualify for various bonuses based mainly on safety performance, and tonnes and grades mined – all in an effort to increase productivity.



Bambanani underground

## OUTLOOK FOR FY16

Relevant Global Reporting Initiative indicators: G4-EC7 and G4-EC8

### Our approach towards our FY16 operational planning:

Harmony's management is devoted to improving the company's operational performance. Our values are entrenched in everything we do – safety, accountability, achievement, being connected and honest – and they inform our decisions and our actions. Realistic planning supports our strategy to optimise assets – our ore bodies, our infrastructure and our people. This will ensure safer, more profitable production.

### Highlights of what we expect for FY16:

- All operations to be profitable by the end of the financial year
- An increase in both total production and underground recovered grade
- Bambanani to remain the most profitable operation in the group and in South Africa as a whole
- Kusasaletu to return to profitability by focusing on high grade areas, reducing its electricity usage and splitting reef and waste tonnes going forward
- Phakisa to be profitable by the end of FY16 and will build up production by increasing volumes while grades will remain stable
- Joel to be marginally cash flow positive, given capital required to develop decline shaft
- Tshepong's production to improve due to higher volumes and a higher recovered grade
- Masimong to be profitable with a shorter life of mine, following restructuring
- Doornkop to generate profits later in FY16 post its restructuring
- Hidden Valley's restructuring should yield a profitable outcome in FY16

Our guidance per operation for FY16 is provided in the tables below:

Operation	FY16 production (oz)	FY16 Cost and capital R/kg	FY16 Cost and capital US\$/oz	Life of mine (years)
Kusasaletu	170 000 – 190 000	410 000 – 440 000		25
Phakisa	90 000 – 110 000	450 000 – 490 000		11
Tshepong	120 000 – 140 000	425 000 – 450 000		20
Target 1	110 000 – 130 000	410 000 – 440 000		10
Bambanani	80 000 – 100 000	260 000 – 300 000		6
Doornkop	70 000 – 90 000	440 000 – 460 000		15
Masimong	65 000 – 80 000	420 000 – 455 000		3
Unisel	45 000 – 55 000	430 000 – 465 000		5
Joel	60 000 – 75 000	410 000 – 440 000		11
<b>Underground operations</b>	810 000 – 970 000	425 000 – 450 000		
Hidden Valley	80 000 – 95 000	395 000 – 425 000		3 – 6
Various surface	50 000 – 55 000	410 000 – 445 000		15+
Kalgold	30 000 – 40 000	420 000 – 450 000		14
<b>Total</b>	<b>~ 1.1Moz</b>	<b>~ R435 000/kg</b>	<b>~ US\$1 080/oz*</b>	

\* An exchange rate of R12.50/US\$ was used

Our FY16 annual production guidance is aimed at increasing margins. Harmony's strategic plans are based on a gold price of R450 000/kg (or US\$1 230/oz) and an exchange rate of R11.38/US\$.

Our target is to produce 1.1Moz at a total cost, including capital, of R435 000/kg (US\$1 080/oz\*).

# OPERATIONAL PERFORMANCE CONTINUED

Our planned capital expenditure will be spent in line with our strategy. The breakdown of the capital expenditure per operation is outlined below:

## Capital expenditure

Operation	FY15 (R million)				FY16 – forecast (R million)			
	On-going capital development	Maintenance capital	Growth capital	Total	On-going capital development	Maintenance capital	Growth capital	Total
Kusasaletu	320	143	0	463	283	158	0	441
Phakisa	309	39	56	404	280	26	0	306
Tshepong	231	65	17	313	239	30	25	294
Target 1	216	76	4	296	220	81	13	314
Bambanani	27	35	48	110	27	39	34	100
Doornkop	154	61	30	245	137	13	18	168
Masimong	135	31	0	166	70	15	0	85
Unisel	56	43	0	99	44	17	0	61
Joel	63	38	81	182	68	22	95	185
Target 3	11	9	0	20	0	0	0	0
<b>Underground operations</b>	<b>1 522</b>	<b>540</b>	<b>236</b>	<b>2 298</b>	<b>1 368</b>	<b>401</b>	<b>185</b>	<b>1 954</b>
Hidden Valley	75	46	0	121	71	64	0	135
Various surface	0	10	0	10	0	11	0	11
Kalgold	0	41	0	41	0	39	0	39
<b>Total R million</b>	<b>1 597</b>	<b>637</b>	<b>236</b>	<b>2 470</b>	<b>1 439</b>	<b>515</b>	<b>185</b>	<b>2 139</b>
Exchange rate (R/US\$)	11.45	11.45	11.45	11.45	12.50	12.50	12.50	12.50
<b>Total US\$ million</b>	<b>140</b>	<b>56</b>	<b>21</b>	<b>216</b>	<b>115</b>	<b>41</b>	<b>15</b>	<b>171</b>

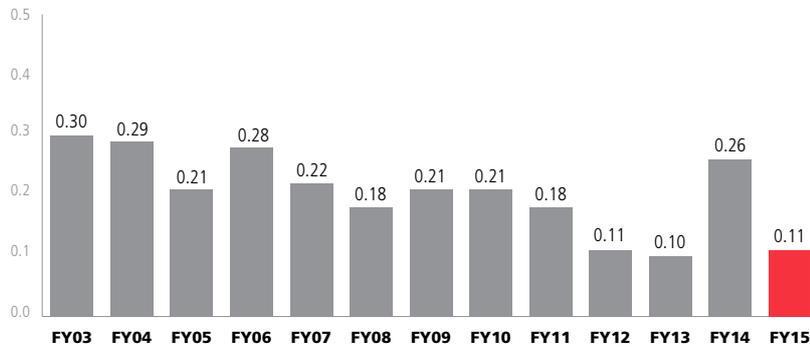
We continue to mine in line with our reserve grades – except at Phakisa, which is still in build-up phase, and at Kusasaletu, which should be mined more in line with its reserve grade following the mine's restructuring.

Operation	Reserve grade (g/t)	Adjusted reserve grade (-5%)	Actual grade (g/t) achieved in FY15	% of reserve grade achieved in FY15	Rating	FY16 grade guidance (g/t)
Kusasaletu	6.18	5.87	4.35	74%	✗	6.5
Phakisa	6.83	6.49	5.10	79%	✗	5.1
Tshepong	5.42	5.15	4.31	84%	✓	4.4
Target 1	5.29	5.03	5.11	102%	✓	4.6
Bambanani	11.33	10.76	12.7	118%	✓	11.5
Doornkop	5.16	4.90	4.42	90%	✓	4.4
Masimong	3.85	3.66	3.68	101%	✓	3.6
Unisel	4.48	4.26	4.06	95%	✓	3.9
Joel	5.24	4.98	4.10	82%	✓	4.2
<b>Underground operations</b>	<b>5.82</b>	<b>5.53</b>	<b>4.75</b>	<b>86%</b>	<b>✓</b>	<b>~5.0</b>

✗	Not yet achieved (below 80%)
✓	Close to target grade (80 to 90%)
✓	Achieved target grade (90% plus)

### Fatality injury frequency rate

Harmony total



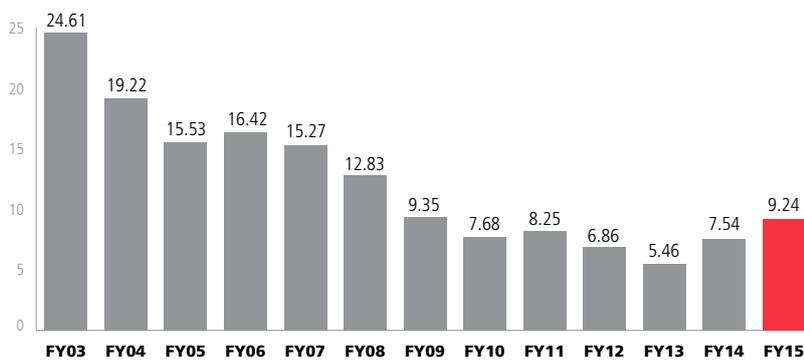
### FY15 Contribution to production by operation (%)



Tshepong	13
Kusasaletu	12
Target 1	11
Hidden Valley	9
Phakisa	9
Bambanani	9
Doornkop	8
Masimong	7
Joel	7
Unisel	5
Kalgold	4
Phoenix	3
Dumps	2
Target 3	1

### Lost-time injury frequency rate

Harmony total



Tshepong headgear

# OPERATIONAL PERFORMANCE CONTINUED

## SOUTH AFRICA – DEEP-LEVEL MINING

### Bambanani

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		1 517	1 584	1 190
– Contractors		330	444	452
Total		1 847	2 028	1 642
<b>Operational</b>				
Volumes milled	(000t) (metric)	229	206	164
	(000t) (imperial)	253	227	180
Gold produced	(kg)	2 908	2 576	1 606
	(oz)	93 495	82 821	51 635
Gold sold	(kg)	2 947	2 567	1 591
	(oz)	94 748	82 530	51 152
Grade	(g/t)	12.70	12.50	9.79
	(oz/t)	0.370	0.365	0.287
<b>Development results</b>				
Total metres		1 150.3	1 092	734
Reef metres		14.7	0	0
Capital metres		0	0	21
Productivity	(g/TEC)	153.08	157.73	113.80
<b>Financial</b>				
Revenue	(Rm)	1 330	1 111	717
	(US\$m)	116	107	81
Average gold price received	(R/kg)	451 200	432 706	450 933
	(US\$/oz)	1 226	1 300	1 590
Cash operating cost	(Rm)	697	574	469
	(US\$m)	61	55	53
Production profit/(loss)	(Rm)	625	537	262
	(US\$m)	55	52	30
Capital expenditure	(Rm)	110	125	115
	(US\$m)	10	12	13
Cash operating cost	(R/kg)	239 552	222 764	292 136
	(US\$/oz)	651	669	1 030
All-in sustaining cost	(R/kg)	276 855	263 867	325 497
	(US\$/oz)	752	793	1 148
<b>Safety</b>				
Number of fatalities		1	1	0
Lost-time injury frequency rate per million hours worked		4.63	7.46	6.56
<b>Environment</b>				
Electricity consumption	(GWh)	133	143	143
Water consumption – primary activities	(ML)	1 731	1 665	1 431
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	137	142	142
Intensity data per tonne treated				
– energy		0.59	0.69	0.87
– water		7.57	8.08	8.72
– greenhouse gas emissions		0.61	0.69	0.87
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development	(Rm)	3	3	6
Training and development*	(Rm)	17	13	13

\* Expenditure on training and development at Bambanani includes that at Steyn 2 for FY14 and FY13

**Bambanani** *continued***Other salient features**

Status of operation	Mature operation with focus on mining of the shaft pillar for the next few years after which it will reach the end of its operating life
Life of mine	6 years
Hoisting capacity (per month)	32 256 tonnes (35 556 tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 ISO 9001 OHSAS 18001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	1.6	11.33	18	–	–	–	1.6	11.33	18
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	1.7	0.331	565	–	–	–	1.7	0.331	565

Bambanani, near Welkom and about 262 kilometres from Johannesburg, has two surface shafts (the East and West shafts). Mining is conducted at a depth of 2 365 metres. Activities at the mine focus on the Basal Reef and are limited to shaft pillar extraction. The ore mined is sent to Harmony One Plant for processing. Given the high risk of seismicity at Bambanani, efforts are focused on managing support systems and the rehabilitation of areas with challenging ground conditions.

Bambanani's all-in sustaining costs are less than US\$800/oz, and it is currently our most profitable mine. It is also the lowest cost underground gold mine with the highest recovered grade in South Africa.

Commissioning of the decline shaft and the provision of associated services are planned to be completed by November 2015, after which ore from the Bambanani shaft pillar extraction, currently being hoisted at East Shaft, will be hoisted via West Shaft.

Bambanani's success in achieving its strategic plan for FY15 can be attributed to its continued mining flexibility and management of ground and seismic risks. Management of these risks included additional pumping to prevent rising water in the sub-shaft, monitoring of seismicity of the shaft pillar and identifying any potential deformation of the vertical shaft before the commissioning of the decline shaft.

Gold production increased by 13% to 2 908kg (93 495oz) in FY15. This was primarily due to the achievement of square metres and grades. Recovered gold grades increased by 2% to 12.70g/t (0.370oz/t) while tonnes milled increased by 11% to 229 000t. The increases in gold production and the average gold price received contributed to a 20% increase in revenue to R1 330 million (8% increase to US\$116 million).

Cash operating costs increased by 21% to R697 million (or 11% to US\$61 million), mainly due to the increase in volumes mined and processed which resulted in higher electricity and labour costs.

Capital expenditure decreased by 12% to R110 million (a decrease of 21% to US\$10 million) primarily due to a R34 million (US\$4 million) reduction in expenditure relating to the shaft pillar extraction project. Most of this was spent on the decline shaft.

# OPERATIONAL PERFORMANCE CONTINUED

## Doornkop

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		2 977	2 836	3 238
– Contractors		493	736	842
Total		3 470	3 572	4 080
<b>Operational</b>				
Volumes milled	(000t) (metric)	603	737	1 008
	(000t) (imperial)	665	812	1 112
Gold produced	(kg)	2 663	2 603	3 631
	(oz)	85 618	83 687	116 738
Gold sold	(kg)	2 711	2 633	3 550
	(oz)	87 160	84 653	114 135
Grade	(g/t)	4.42	3.53	3.60
	(oz/t)	0.129	0.103	0.105
Productivity	(g/TEC)	68.47	63.57	87.71
<b>Development results</b>				
Total metres (excl. capital metres)		8 919	8 322	12 501
Reef metres		1 701	1 475	1 625
Capital metres		0	0	0
<b>Financial</b>				
Revenue	(Rm)	1 220	1 126	1 615
	(US\$m)	107	109	183
Average gold price received	(R/kg)	449 857	427 728	454 937
	(US\$/oz)	1 222	1 285	1 604
Cash operating cost	(Rm)	1 071	1 095	1 077
	(US\$m)	94	106	122
Production profit/(loss)	(Rm)	128	28	573
	(US\$m)	12	3	65
Capital expenditure	(Rm)	245	238	285
	(US\$m)	21	23	32
Cash operating cost	(R/kg)	402 065	420 617	296 714
	(US\$/oz)	1 092	1 264	1 046
All-in sustaining cost	(R/kg)	508 743	523 839	380 935
	(US\$/oz)	1 382	1 574	1 343
<b>Safety</b>				
Number of fatalities		1	11	0
Lost-time injury frequency rate per million hours worked		7.14	9.06	5.30
<b>Environment</b>				
Electricity consumption	(GWh)	205	187	216
Water consumption – primary activities	(ML)	733	1 010	760
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	211	186	214
Intensity data per tonne treated				
– energy		0.34	0.25	0.21
– water		1.26	1.37	0.75
– greenhouse gas emissions		0.35	0.25	0.21
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development*	(Rm)	37	25	7
Training and development	(Rm)	35	23	17

\* Included in the total for FY15 is an amount of R28 million that was capitalised as part of the hostel upgrades (FY14: R10 million)

**Doornkop** *continued***Other salient features**

Status of operation	Recently completed its restructuring process. Mining takes place on the South Reef at this single-shaft operation.
Life of mine	15 years
Hoisting capacity (per month)	91 480 tonnes ( 100 839 tons)
Compliance and certification	New order mining right – October 2008 ISO 14001 ISO 9001 OHSAS 18001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	1.3	5.00	7	3.8	5.22	20	5.1	5.16	26
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	1.4	0.146	211	4.2	0.152	636	5.6	0.151	847

Doornkop, a single-shaft operation, is located in the province of Gauteng of South Africa, approximately 30 kilometres west of Johannesburg, on the northern rim of the Witwatersrand Basin. Mining is conducted at a depth of 1 978 metres. The operation focuses on narrow-reef conventional mining of the South Reef. The ore from the operation is processed at the Doornkop plant.

Doornkop's performance was influenced by ever increasing operational costs, unplanned events (the fire and fatal accidents) and low productivity levels. Key challenges, which are receiving management's attention, include the complex geology which necessitates frequent changes to mine layouts, logistical bottlenecks in the horizontal tramming section and the need to reduce costs significantly to improve profit margins.

As Doornkop continued to incur losses, restructuring at the mine became essential given the current gold price environment and the significant capital investment required to sustain operations at this shaft. Consequently, in line with the Labour Relations Act, 66 of 1995, a Section 189A was issued at Doornkop in May 2015. Post year-end, the Section 189A process was concluded on 31 July 2015 with only 528 employees including contractors being affected, most of whom were transferred to vacant positions at other operations. The remaining 186 people chose to be re-skilled for redeployment into alternative positions within the company or accepted the voluntary severance packages offered to Doornkop employees.

Doornkop's life of mine has been shortened to 15 years and emphasis has been placed on creating mining flexibility, achieving stoping targets, reclaiming material from older areas to reduce the cost of consumables and using exploration drilling to improve the geological information available on and confidence levels in the ore body. The new mining plan for Doornkop will focus on mining the higher-grade areas of the South Reef ore body on 192 and 197 levels.

Gold production increased by 2% to 2 663kg (85 618oz) in FY15. Recovered gold grades improved by 25% to 4.42g/t (0.129oz/t) while tonnes milled fell by 18% to 603 000t. The decrease in tonnes milled was due to closure of the low-grade Kimberley Reef section during FY14. The increase in gold production, combined with the increase in the average rand gold price received, resulted in an 8% increase in revenue to R1 220 million (2% decrease to US\$107 million).

Cash operating costs decreased by 2% to R1 071 million (decreased by 11% to US\$94 million).

Capital expenditure increased by 3% to R245 million (decreased by 9% to US\$21 million) and was spent mainly on on-going development.

# OPERATIONAL PERFORMANCE CONTINUED

## Joel

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		1 818	1 594	1 570
– Contractors		81	189	182
Total		1 899	1 783	1 752
<b>Operational</b>				
Volumes milled	(000t) (metric)	551	548	611
	(000t) (imperial)	607	604	674
Gold produced	(kg)	2 258	2 335	3 228
	(oz)	72 596	75 072	103 782
Gold sold	(kg)	2 330	2 308	3 192
	(oz)	74 911	74 204	102 625
Grade	(g/t)	4.10	4.26	5.28
	(oz/t)	0.119	0.124	0.154
Productivity	(g/TEC)	115.65	125.78	173.77
<b>Development results</b>				
Total metres		3 200	2 881	3 303
Reef metres		1 037	1 079	947
Capital metres		338	993	1 271
<b>Financial</b>				
Revenue	(Rm)	1 046	995	1 452
	(US\$m)	91	96	165
Average gold price received	(R/kg)	449 026	430 929	454 880
	(US\$/oz)	1 220	1 295	1 604
Cash operating cost	(Rm)	755	688	667
	(US\$m)	66	66	76
Production profit/(loss)	(Rm)	276	327	798
	(US\$m)	24	32	90
Capital expenditure	(Rm)	182	145	160
	(US\$m)	16	14	18
Cash operating cost	(R/kg)	334 168	294 493	206 737
	(US\$/oz)	908	885	729
All-in sustaining cost	(R/kg)	390 417	338 957	252 342
	(US\$/oz)	1 061	1 019	890
<b>Safety</b>				
Number of fatalities		0	2	2
Lost-time injury frequency rate per million hours worked		3.72	3.25	2.42
<b>Environment</b>				
Electricity consumption	(GWh)	101	103	105
Water consumption – primary activities	(ML)	671	498	654
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	104	102	104
Intensity data per tonne treated				
– energy		0.18	0.19	0.17
– water		1.22	0.91	1.07
– greenhouse gas emissions		0.19	0.19	0.17
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development	(Rm)	3	3	7
Training and development	(Rm)	15	11	8

**Joel** *continued*

Other salient features	
Status of operation	Twin-shaft operation – technically challenging
Life of mine	11 years
Hoisting capacity (per month)	47 174 tonnes (52 000 tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 ISO 9001 OHSAS 18001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	2.0	5.32	11	3.7	5.20	19	5.7	5.24	30
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	2.2	0.155	347	4.1	0.152	621	6.3	0.153	968

Joel is located in the Free State Province and about 292 kilometres from Johannesburg, on the southern edge of the Witwatersrand Basin. The mine comprises two shafts, the North and South shafts. The primary economical reef horizon at Joel is a narrow tabular Beatrix Reef deposit which is accessed via conventional grid development. Mining is conducted at a depth of 1 452 metres. The ore is processed at the Joel plant.

Joel's focus is on maintaining mining grades.

Managing the shaft and project schedules is critical for Joel, given its limited shaft flexibility. The 137 decline project began in October 2014 and the focus currently is to finalise the project in the next two years. First production from this area is expected in July 2017. Joel's future operating life depends on successful completion of the decline shaft system.

High levels of capital expenditure on the decline shaft project will result in low profit margins over the next two years.

Management is addressing potential risks to achieving the production plan, such as expected grade variations, water and gas intersections in the decline shaft barrels and managing the limited hoisting capacity of the North shaft.

Gold production decreased by 3% to 2 258kg (72 596oz) in FY15. Recovered gold grades declined by 4% to 4.10g/t (0.119oz/t) while tonnes milled increased by 1% to 551 000t. The decrease in gold production, offset by the increase in the average rand gold price received, resulted in a 5% increase in revenue to R1 046 million (5% decrease to US\$91 million).

Cash operating costs increased by 10% to R755 million (unchanged at US\$66 million) due to a 9% increase in volumes mined and higher electricity and labour costs.

Capital expenditure increased by 26% to R182 million (increased 14% to US\$16 million) primarily due to 137 decline and on-going development.

# OPERATIONAL PERFORMANCE CONTINUED

## Kusasaletu

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		3 898	5 139	5 023
– Contractors		1 020	1 302	909
Total		4 918	6 441	5 932
<b>Operational</b>				
Volumes milled	(000t) (metric)	908	1 143	711
	(000t) (imperial)	1 001	1 260	784
Gold produced	(kg)	3 953	4 694	2 740
	(oz)	127 092	150 916	88 093
Gold sold	(kg)	4 297	4 531	2 698
	(oz)	138 151	145 673	86 742
Grade	(g/t)	4.35	4.11	3.85
	(oz/t)	0.127	0.120	0.112
Productivity	(g/TEC)	65.59	73.60	42.86
<b>Development results</b>				
Total metres		13 777	15 077	9 361
Reef metres		2436	3 107	1 487
Capital metres		59	–	–
<b>Financial</b>				
Revenue	(Rm)	1 939	1 959	1 213
	(US\$m)	169	189	137
Average gold price received	(R/kg)	451 211	432 358	449 531
	(US\$/oz)	1 226	1 299	1 585
Cash operating cost	(Rm)	1 866	1 830	1 516
	(US\$m)	163	177	172
Production profit/(loss)	(Rm)	(57)	206	(271)
	(US\$m)	(5)	20	(31)
Capital expenditure	(Rm)	463	509	420
	(US\$m)	40	49	48
Cash operating cost	(R/kg)	472 112	389 762	553 358
	(US\$/oz)	1 283	1 171	1 951
All-in sustaining cost	(R/kg)	594 399	522 347	742 033
	(US\$/oz)	1 615	1 570	2 616
<b>Safety</b>				
Number of fatalities		1	3	2
Lost-time injury frequency rate per million hours worked		25.80	9.56	4.25
<b>Environment</b>				
Electricity consumption	(GWh)	682	664	580
Water consumption – primary activities	(ML)	1 342	1 418	2 591
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	702	660	574
Intensity data per tonne treated				
– energy		0.75	0.58	0.82
– water		1.48	1.23	3.64
– greenhouse gas emissions		0.77	0.58	0.81
Number of reportable environmental incidents		1	2	2
<b>Community</b>				
Local economic development*	(Rm)	30	65	21
Training and development	(Rm)	50	37	35

\* Included in the total for FY15 is an amount of R18 million that was capitalised as part of the hostel upgrades (FY14: R52 million)

**Kusasaletu** *continued***Other salient features**

Status of operation	Minimising costs and increasing volumes are a priority
Life of mine	25 years
Hoisting capacity (per month)	200 000 tonnes (220 460 tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 ISO 9001 Cyanide Code

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	6.5	6.83	44	20.1	5.97	120	26.6	6.18	164
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	7.1	0.199	1 419	22.2	0.174	3 856	29.3	0.180	5 274

Kusasaletu is located about 90 kilometres from Johannesburg, near the provincial border of Gauteng and North West Province. Kusasaletu is situated in the West Witwatersrand Basin and mines the Ventersdorp Contact Reef as its main ore body. The mine comprises twin vertical and twin sub-vertical shaft systems and uses conventional mining methods in a sequential grid layout. Mining is conducted at a depth of 3 388 metres, making it Harmony's deepest mine. Ore mined is treated at the Kusasaletu plant.

Kusasaletu operations were hampered by safety stoppages, underground fires and illegal mining activities during FY15. In November 2014, Kusasaletu was closed for a two-week period during which time we removed all illegal miners and enhanced all our security and access control measures at the mine.

Despite our best efforts – which included establishing a new management team and involving external advisors – the mine has been making losses since December 2012. To restore Kusasaletu to profitability, restructuring of the mine began in December 2014 with the issuing of a section 189A notice in terms of the Labour Relations Act, 66 of 1995. This process, which was concluded in February 2015, impacted 1 271 employees. Kusasaletu's new mine plan is based on the mining of lower volumes at higher grades at a reduced cost. As a result, the old mining areas on levels 78 to 95 have been abandoned.

Investments to improve the plant have been made and include enhanced measures to prevent gold theft. Most of the infrastructure issues experienced in FY14 have been resolved. The mine's ageing infrastructure will continue to require attention and further investment is required to ensure that we meet our production target for FY16. Availability and flexibility of mining panels will be vital to the success of this mine.

A profitable turnaround at Kusasaletu is expected in FY16. Plans to achieve the turnaround include achieving the planned production by increasing the grades we mine from 1 270 cm grams/tonne in FY15 to a targeted 1 450 cm grams/tonne in FY16, splitting reef and waste tonnes, and completing the ventilation and cooling improvement project.

Challenges include maintaining efficiencies at the metallurgical plant, eliminating illegal mining and gold theft, and producing sufficient backfill at the plant for operational support.

Gold production decreased by 16% to 3 953kg (127 092oz) in FY15. This was primarily due to the reduction in tonnes milled. Recovered gold grades increased by 6% to 4.35g/t (0.127oz/t) while tonnes milled fell by 21% to 908 000t. The decrease in gold production, partially offset by the increase in the average rand gold price received, resulted in 1% decrease in revenue to R1 939 million (11% decrease to US\$169 million).

Cash operating costs increased by 2% to R1 866 million (8% decrease to US\$163 million).

Capital expenditure decreased by 9% to R463 million (18% decrease to US\$40 million), mainly due to reduced shaft capital expenditure. Capital was spent mainly on on-going development.

# OPERATIONAL PERFORMANCE CONTINUED

## Masimong

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		2 470	2 868	3 098
– Contractors		99	118	233
Total		2 569	2 986	3 331
<b>Operational</b>				
Volumes milled	(000t) (metric)	670	670	868
	(000t) (imperial)	739	739	958
Gold produced	(kg)	2 463	2 718	3 616
	(oz)	79 187	87 385	116 256
Gold sold	(kg)	2 491	2 708	3 598
	(oz)	80 087	87 064	115 679
Grade	(g/t)	3.68	4.06	4.17
	(oz/t)	0.107	0.118	0.121
Productivity	(g/TEC)	75.27	78.00	99.88
<b>Development results</b>				
Total metres		9 855	10 079	10 600
Reef metres		2 376	1 547	1 574
<b>Financial</b>				
Revenue	(Rm)	1 118	1 171	1 640
	(US\$m)	98	113	186
Average gold price received	(R/kg)	448 867	432 416	455 782
	(US\$/oz)	1 220	1 299	1 607
Cash operating cost	(Rm)	979	978	985
	(US\$m)	86	95	112
Production profit/(loss)	(Rm)	126	188	665
	(US\$m)	11	18	76
Capital expenditure	(Rm)	166	168	171
	(US\$m)	15	16	19
Cash operating cost	(R/kg)	397 380	360 006	272 403
	(US\$/oz)	1 080	1 082	960
All-in sustaining cost	(R/kg)	486 861	450 210	346 557
	(US\$/oz)	1 323	1 353	1 222
<b>Safety</b>				
Number of fatalities		1	2	1
Lost-time injury frequency rate per million hours worked		12.09	15.80	7.31
<b>Environment</b>				
Electricity consumption	(GWh)	184	196	208
Water consumption – primary activities	(ML)	859	874	891
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	190	195	206
Intensity data per tonne treated				
– energy		0.28	0.29	0.24
– water		1.28	1.30	1.03
– greenhouse gas emissions		0.29	0.29	0.23
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development*	(Rm)	6	17	15
Training and development	(Rm)	25	20	13

\* Included in the total for FY15 is an amount of R0 million that was capitalised as part of the hostel upgrades (FY14: R11 million)

**Masimong** *continued*

Other salient features	
Status of operation	Mature, single shaft operation nearing the end of its life of mine.
Life of mine	3 years
Hoisting capacity (per month)	108 863 tonnes (120 000 tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 ISO 9001 OHSAS 18001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	1.7	3.87	7	0.2	3.66	1	1.9	3.85	7
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	1.9	0.113	212	0.2	0.107	23	2.1	0.112	235

Masimong is located in the Free State Province, near the city of Welkom and about 260 kilometres from Johannesburg. The Masimong complex comprises an operating shaft (5 shaft), and a second shaft (4 shaft), which, although closed for mining, is used for ventilation, pumping and as a second outlet. Masimong exploits the Basal Reef and the B Reef. Mining is conducted at a depth of 2 050 metres. Ore mined is processed at the Harmony One plant.

In line with our strategy, we restructured Masimong to improve its profitability during FY15 by scaling down ore body development in an effort to reduce costs and increase margins. The restructuring process was completed in June 2015 and the expected life of mine has been shortened to three years.

Factors which will contribute to Masimong's success include quality mining practices and achieving targeted volumes, improved safety performance leading to fewer stoppages, preventing access by illegal miners and being cost efficient.

Essential to the success of this restructuring will be to secure the workforce's commitment towards the end of the life of the mine, while operating the mine at a low profit margin.

Gold production decreased by 9% to 2 463kg (79 187oz) in FY15, mainly due to the lower grades mined, a result of the lower grade yielded by the B Reef than in previous years. A fatality in January 2015 and two underground fires also affected production. Recovered gold grades decreased by 9% to 3.68g/t (0.107oz/t) while tonnes milled remained unchanged at 670 000t. The decrease in gold production and increase in average gold price received resulted in a 5% decrease in revenue to R1 118 million (13% decrease to US\$98 million).

Cash operating costs remained almost unchanged at R979 million (9% decrease to US\$86 million).

Capital expenditure decreased by 1% to R166 million (decreased by 6% to US\$15 million). Capital was spent mainly on on-going development.

# OPERATIONAL PERFORMANCE CONTINUED

## Phakisa

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		3 344	3 460	3 708
– Contractors		392	325	332
Total		3 736	3 785	4 040
<b>Operational</b>				
Volumes milled	(000t) (metric)	611	577	512
	(000t) (imperial)	674	636	565
Gold produced	(kg)	3 118	2 976	2 434
	(oz)	100 246	95 680	78 255
Gold sold	(kg)	3 156	2 963	2 423
	(oz)	101 468	95 263	77 902
Grade	(g/t)	5.10	5.16	4.75
	(oz/t)	0.149	0.150	0.139
Productivity	(g/TEC)	76.99	70.72	53.87
<b>Development results</b>				
Total metres		12 138	11 298	10 684
Reef metres		1 749	1 364	1 191
Capital metres		162	101	184
<b>Financial</b>				
Revenue	(Rm)	1 420	1 284	1 103
	(US\$m)	124	124	125
Average gold price received	(R/kg)	449 969	433 199	455 063
	(US\$/oz)	1 223	1 302	1 604
Cash operating cost	(Rm)	1 166	1 068	986
	(US\$m)	102	103	112
Production profit/(loss)	(Rm)	239	223	121
	(US\$m)	21	21	14
Capital expenditure	(Rm)	403	360	337
	(US\$m)	35	35	38
Cash operating cost	(R/kg)	373 876	358 995	405 077
	(US\$/oz)	1 016	1 079	1 428
All-in sustaining cost	(R/kg)	501 996	486 710	549 340
	(US\$/oz)	1 364	1 463	1 937
<b>Safety</b>				
Number of fatalities		0	1	1
Lost-time injury frequency rate per million hours worked		8.76	7.73	8.80
<b>Environment</b>				
Electricity consumption	(GWh)	143	126	113
Water consumption – primary activities	(ML)	1 155	1 090	880
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	147	125	112
Intensity data per tonne treated				
– energy		0.23	0.22	0.22
– water		1.89	1.89	1.72
– greenhouse gas emissions		0.24	0.22	0.22
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development*	(Rm)	12	11	8
Training and development	(Rm)	32	30	26

\* Included in the total for FY15 is an amount of R3 million that was capitalised as part of the hostel upgrades (FY14: R4 million)

**Phakisa** *continued*

Other salient features	
Status of operation	Production ramp up continues
Life of mine	11 years
Hoisting capacity (per month)	103 000 tonnes (113 537 imperial tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 ISO 9001 OHSAS 18001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	6.1	6.61	40	2.1	7.49	16	8.2	6.83	56
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	6.7	0.193	1 294	2.3	0.218	499	9.0	0.199	1 792

Phakisa is located in the Free State Province, some 252 kilometres from Johannesburg. The mine has two shafts, the main Phakisa shaft and the Nyala shaft. The latter is used to hoist rock and serves as a second escape route. Phakisa exploits the Basal Reef. Mining is conducted at a depth of 2 426 metres. Ore mined is processed at the Harmony One plant.

Phakisa achieved planned development metres during FY15, which will ensure future mining flexibility. Build-up of production will continue and the focus will be on achieving planned mine call factor and stoping width targets.

Risks receiving management's focus include the sourcing and training of additional labour in time for the production build up, managing logistical challenges including the single-man winder arrangement, the Koepe rock winder and the rail-veyor™ ore-handling system.

Gold production increased by 5% to 3 118kg (100 246oz) in FY15. This was primarily due to an increase in volumes mined, in line with the planned build-up. Recovered gold grades decreased by 1% to 5.10g/t (0.149oz/t) while tonnes milled increased by 6% to 611 000t. The increases in gold production and the average gold price received resulted in an 11% increase in revenue to R1 420 million (unchanged at US\$124 million).

Cash operating costs increased by 9% to R1 166 million (decrease by 1% to US\$102 million).

Capital expenditure increased by 12% to R403 million (unchanged at US\$35 million), primarily due to the higher rate of on-going development during the year.

# OPERATIONAL PERFORMANCE CONTINUED

## Target 1

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		1 683	1 624	1 629
– Contractors		266	270	250
Total		1 949	1 894	1 879
<b>Operational</b>				
Volumes milled	(000t) (metric)	749	771	717
	(000t) (imperial)	826	851	790
Gold produced	(kg)	3 824	4 493	3 967
	(oz)	122 944	144 453	127 542
Gold sold	(kg)	3 868	4 508	3 925
	(oz)	124 358	144 936	126 191
Grade	(g/t)	5.11	5.83	5.53
	(oz/t)	0.149	0.170	0.161
Productivity	(g/TEC)	172.25	206.06	184.79
<b>Development results</b>				
Total metres		4 174	4 292	3 732
Reef metres		290	436	691
Capital metres		0	0	490
<b>Financial</b>				
Revenue	(Rm)	1 738	1 948	1 794
	(US\$m)	152	188	203
Average gold price received	(R/kg)	449 319	432 031	457 149
	(US\$/oz)	1 221	1 298	1 612
Cash operating cost	(Rm)	1 178	1 049	947
	(US\$m)	103	101	107
Production profit/(loss)	(Rm)	547	897	857
	(US\$m)	48	87	97
Capital expenditure	(Rm)	296	289	331
	(US\$m)	26	28	38
Cash operating cost	(R/kg)	308 156	233 487	238 840
	(US\$/oz)	837	702	842
All-in sustaining cost	(R/kg)	399 642	312 436	338 405
	(US\$/oz)	1 086	939	1 193
<b>Safety</b>				
Number of fatalities		0	0	0
Lost-time injury frequency rate per million hours worked		4.51	1.30	3.66
<b>Environment</b>				
Electricity consumption	(GWh)	242	242	243
Water consumption – primary activities	(ML)	808	790	759
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	249	251	240
Intensity data per tonne treated				
– energy		0.32	0.31	0.33
– water		1.22	1.02	1.06
– greenhouse gas emissions		0.33	0.31	0.33
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development	(Rm)	4	4	6
Training and development	(Rm)	30	20	19

**Target 1** *continued*

Other salient features	
Status of operation	Single, cost efficient shaft operation.
Life of mine	10 years
Hoisting capacity (per month)	89 994 tonnes (99 200 tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 ISO 9001 OHSAS 18001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	3.2	5.45	17	3.8	5.16	19	7.0	5.29	37
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	3.5	0.159	562	4.2	0.150	625	7.7	0.154	1 187

Target 1 is located in the Free State Province, some 270 kilometres southwest of Johannesburg. Mining operations at Target 1 comprise one primary underground mine, with a depth of approximately 2 945 metres. While most of the ore extracted comes from mechanised mining (massive mining techniques), conventional stoping is still employed primarily to de-stress areas ahead of mechanised mining. Ore mined is processed at the Target plant.

The gold mineralisation currently exploited at Target 1 is contained within a succession of Elsburg and Dreyerskuil quartz pebble conglomerate reefs.

Target 1 manages its risks by focusing on trackless development to ensure the timeous availability of massive stopes and to prevent excessive dilution from waste and backfill in the pillar areas which could impact negatively on the delivered grade. Future success will depend on the availability of trackless mining equipment and performance regarding volumes and grade from the deeper Block 3 extension of the mine.

Gold production decreased by 15% to 3 824kg (122 944oz) in FY15, due primarily to the normalisation of the excessively high grades mined from both the massives (pillars) and from the high-grade narrow reef intersections mined during FY14. As a result, the recovered gold grade declined by 12% to 5.11g/t (0.149oz/t) and tonnes milled by 3% to 749 000t. The decrease in gold production was offset by an increase in the average gold price received, resulting in an 11% decrease in revenue to R1 738 million (19% decrease to US\$152 million).

Cash operating costs rose by 12% to R1 178 million (2% increase to US\$103 million) owing to a 21% increase in the cost of consumables. Capital expenditure, which increased by 2% to R296 million (decrease of 7% to US\$26 million), was spent mainly on on-going development.

# OPERATIONAL PERFORMANCE CONTINUED

## Tshepong

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		4 218	4 132	4 758
– Contractors		210	216	258
Total		4 428	4 348	5 016
<b>Operational</b>				
Volumes milled	(000t) (metric)	992	947	1 040
	(000t) (imperial)	1 095	1 044	1 147
Gold produced	(kg)	4 278	4 223	4 154
	(oz)	137 540	135 772	133 554
Gold sold	(kg)	4 337	4 204	4 135
	(oz)	139 437	135 161	132 944
Grade	(g/t)	4.31	4.46	3.99
	(oz/t)	0.126	0.130	0.116
Productivity	(g/TEC)	86.05	84.33	72.80
<b>Development results</b>				
Total metres		13 053	12 762	13 125
Reef metres		1 822	2 209	2 541
Capital metres		0	79	352
<b>Financial</b>				
Revenue	(Rm)	1 948	1 822	1 887
	(US\$m)	170	176	214
Average gold price received	(R/kg)	449 211	433 425	456 294
	(US\$/oz)	1 221	1 302	1 609
Cash operating cost	(Rm)	1 588	1 379	1 429
	(US\$m)	139	133	162
Production profit/(loss)	(Rm)	337	457	460
	(US\$m)	29	44	52
Capital expenditure	(Rm)	313	301	310
	(US\$m)	27	29	35
Cash operating cost	(R/kg)	371 149	326 498	343 895
	(US\$/oz)	1 008	981	1 212
All-in sustaining cost	(R/kg)	460 844	415 061	441 108
	(US\$/oz)	1 252	1 247	1 555
<b>Safety</b>				
Number of fatalities		1	2	1
Lost-time injury frequency rate per million hours worked		5.72	8.33	8.67
<b>Environment</b>				
Electricity consumption	(GWh)	307	301	310
Water consumption – primary activities	(ML)	1 110	1 090	1 088
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	316	299	307
Intensity data per tonne treated				
– energy		0.31	0.32	0.30
– water		1.12	1.15	1.05
– greenhouse gas emissions		0.32	0.32	0.30
Number of reportable environmental incidents		0	1	1
<b>Community</b>				
Local economic development*	(Rm)	33	30	9
Training and development	(Rm)	33	24	23

\* Included in the total for FY15 is an amount of R24 million that was capitalised as part of the hostel upgrades (FY14: R22 million)

**Tshepong** *continued*

Other salient features	
Status of operation	Steady state operation: development continues
Life of mine	20 years
Hoisting capacity (per month)	214 000 tonnes (235 892 tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 ISO 9001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	18.4	5.58	102	3.3	4.50	15	21.6	5.42	117
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	20.2	0.163	3 294	3.6	0.131	474	23.8	0.158	3 768

Tshepong is located in the Free State Province, near Welkom, about 248 kilometres from Johannesburg. Mining is conducted at a depth of 2 349 metres. The mine uses conventional undercut mining in the Basal Reef while the B Reef is exploited as a high grade secondary reef. Ore mined is processed at the Harmony One plant.

Success at Tshepong will be ensured by the continued improvement in safety performance, the timely equipping of panels to maintain mining flexibility and the build-up in production from the sub-66 decline which is driving the improvement in grade.

Challenges receiving management's attention are: to consistently achieve the increased square metre profile and to manage the geologically complex (excessive fault and dyke intrusions) decline area.

Gold production increased by 1% to 4 278kg (137 540oz) in FY15, due primarily to an increase in volumes extracted. Recovered gold grade decreased by 3% to 4.31g/t (0.126 oz/t) while tonnes milled rose by 5% to 992 000t. The increase in gold production and the average gold price received, in rand terms, resulted in 7% increase in revenue to R1 948 million (3% decrease to US\$170 million).

Cash operating costs increased by 15% to R1 588 million (increased 5% to US\$139 million).

Capital expenditure increased by 4% to R313 million (decreased 7% to US\$27 million). Capital was mainly spent on on-going development.



Briefing at Tshepong underground

# OPERATIONAL PERFORMANCE CONTINUED

## Unisel

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		1 809	1 809	1 845
– Contractors		114	148	143
Total		1 923	1 957	1 988
<b>Operational</b>				
Volumes milled	(000t) (metric)	417	408	446
	(000t) (imperial)	460	450	492
Gold produced	(kg)	1 695	1 838	1 813
	(oz)	54 495	59 093	58 289
Gold sold	(kg)	1 715	1 834	1 804
	(oz)	55 138	58 964	58 000
Grade	(g/t)	4.06	4.50	4.07
	(oz/t)	0.118	0.131	0.118
Productivity	(g/TEC)	77.82	85.33	82.24
<b>Development results</b>				
Total metres		5 177	5 641	6 380
Reef metres		2 816	3 462	3 514
<b>Financial</b>				
Revenue	(Rm)	770	792	825
	(US\$m)	67	77	93
Average gold price received	(R/kg)	449 082	432 072	457 160
	(US\$/oz)	1 220	1 298	1 612
Cash operating cost	(Rm)	674	600	571
	(US\$m)	59	58	65
Production profit/(loss)	(Rm)	88	192	258
	(US\$m)	7	19	29
Capital expenditure	(Rm)	99	85	78
	(US\$m)	9	8	9
Cash operating cost	(R/kg)	397 615	326 466	315 136
	(US\$/oz)	1 080	981	1 111
All-in sustaining cost	(R/kg)	477 013	397 993	388 617
	(US\$/oz)	1 296	1 196	1 370
<b>Safety</b>				
Number of fatalities		1	0	1
Lost-time injury frequency rate per million hours worked		8.74	11.66	12.27
<b>Environment</b>				
Electricity consumption	(GWh)	109	110	111
Water consumption – primary activities	(ML)	519	711	1 431
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	112	109	110
Intensity data per tonne treated				
– energy		0.26	0.27	0.25
– water		1.25	1.74	3.21
– greenhouse gas emissions		0.27	0.27	0.25
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development*	(Rm)	19	12	16
Training and development	(Rm)	21	15	13

\* Included in the total for FY15 is an amount of R15 million that was capitalised as part of the hostel upgrades (FY14: R8 million)

**Unisel** *continued*

Other salient features	
Status of operation	Approaching end of life of mine.
Life of mine	5 years
Hoisting capacity (per month)	60 000 tonnes (66 138 tons)
Compliance and certification	New order mining right – December 2007 ISO 9001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	1.8	4.55	8	0.8	4.33	3	2.6	4.48	12
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	2.0	0.133	268	0.9	0.126	111	2.9	0.131	380

Unisel is located in the Free State Province, near Virginia and about 271 kilometres from Johannesburg. Mining is conducted at a depth of 2 153 metres below surface. Conventional scattered mining and pillar reclamation takes place to access the Basal, Leader and, to a lesser extent, the Middle reefs. Ore mined is processed at Harmony One plant.

Unisel is nearing the end of its operating life, but has been a good performer despite being Harmony's oldest operating mine. An emphasis on clean mining practices and the mining of high-grade panels contributed to improved grade recoveries and an increase in production year on year.

Successes are attributable to the improved safety performance with fewer stoppages and the achievement of planned volumes mined, especially in the high-grade areas.

Risks receiving management attention include the ageing shaft infrastructure and equipment and maintenance of a small profit margin.

Gold production decreased by 8% to 1 695kg (54 495oz) in FY15, due primarily to the late start-up after the December 2014 break and the halt to production following a fatality in April 2015. The recovered gold grade declined by 10% to 4.06g/t (0.118oz/t) while tonnes milled increased by 2% to 417 000t. The decrease in gold production was partially offset by an increase in the average rand gold price received, which resulted in a 3% decrease in revenue to R770 million (13% decrease to US\$67 million).

Cash operating costs increased by 12% to R674 million (increased by 2% to US\$59 million).

Capital expenditure increased by 16% to R99 million (increased by 13% to US\$9 million), due primarily to greater expenditure on maintenance and hostel upgrades. Capital was mainly spent on on-going development.

# OPERATIONAL PERFORMANCE CONTINUED

## SOUTH AFRICA – SURFACE OPERATIONS

### Surface dumps

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		10	13	39
– Contractors		174	129	240
Total		184	142	279
<b>Operational</b>				
Volumes milled	(000t) (metric)	2 701	2 897	3 326
	(000t) (imperial)	2 978	3 196	3 668
Gold produced	(kg)	862	903	1 279
	(oz)	27 713	29 032	41 121
Grade	(g/t)	0.32	0.31	0.38
	(oz/t)	0.009	0.009	0.011
<b>Financial</b>				
Revenue	(Rm)	389	386	579
	(US\$m)	34	37	66
Average gold price received	(R/kg)	450 420	431 172	452 899
	(US\$/oz)	1 224	1 296	1 597
Cash operating cost	(Rm)	330	328	432
	(US\$m)	29	32	49
Production profit/(loss)	(Rm)	58	62	152
	(US\$m)	5	6	17
Capital expenditure	(Rm)	6	9	15
	(US\$m)	1	1	2
Cash operating cost	(R/kg)	382 959	363 568	337 428
	(US\$/oz)	1 041	1 092	1 190
All-in sustaining cost	(R/kg)	403 906	383 701	365 401
	(US\$/oz)	1 097	1 153	1 288
<b>Safety</b>				
Number of fatalities		0	0	0
Lost-time injury frequency rate per million hours worked		2.48	0.83	0.71
<b>Environment</b>				
Electricity consumption	(GWh)	64	68	68
Water consumption – primary activities	(ML)	480	816	763
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	66	67	67
Intensity data per tonne treated				
– energy		0.02	0.23	0.20
– water		0.18	0.28	0.23
– greenhouse gas emissions		0.02	0.23	0.23
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development	(Rm)	0	0	1

**Surface dumps** *continued***Other salient features**

Status of operation	The operational plans are for a profitable FY16
Life of mine	1 year
Compliance and certification	Certification depends on future of these operations ISO 9001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	–	–	–	3.9	0.51	2	3.9	0.51	2
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	–	–	–	4.3	0.015	65	4.3	0.015	65

Production from the processing of surface rock dumps situated in the Free State province in South Africa depends entirely on the availability of spare mill capacity at the Harmony One and Target plants, which in turn depends on the availability of underground ore delivered for milling. Central Plant treats only re-mined, redundant plant clean-up and rock dumps. Improved mine ore feeds throughout the year resulted in steadily lower gold production from the generally lower-grade dump material, and the surface operations remained profitable.



*Kalgold surface mining*

# OPERATIONAL PERFORMANCE CONTINUED

## Phoenix (Tailings retreatment)

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		83	83	87
– Contractors		312	293	286
Total		395	376	373
<b>Operational</b>				
Volumes milled	(000t) (metric)	6 245	6 073	5 358
	(000t) (imperial)	6 887	6 697	5 908
Gold produced	(kg)	867	835	827
	(oz)	27 875	26 846	26 588
Gold sold	(kg)	881	825	805
	(oz)	28 324	26 524	25 882
Grade	(g/t)	0.14	0.14	0.15
	(oz/t)	0.004	0.004	0.005
Productivity	(g/TEC)	185.73	201.11	220.89
<b>Financial</b>				
Revenue	(Rm)	396	357	365
	(US\$m)	35	35	41
Average gold price received	(R/kg)	449 941	433 293	453 680
	(US\$/oz)	1 223	1 302	1 599
Cash operating cost	(Rm)	295	246	231
	(US\$m)	26	24	26
Production profit/(loss)	(Rm)	97	117	140
	(US\$m)	8	11	16
Capital expenditure	(Rm)	4	2	156
	(US\$m)	–	–	18
Cash operating cost	(R/kg)	339 896	294 408	279 615
	(US\$/oz)	924	885	986
All-in sustaining cost	(R/kg)	344 319	294 615	284 911
	(US\$/oz)	936	885	1 005
<b>Safety</b>				
Number of fatalities		0	0	0
Lost-time injury frequency rate per million hours worked		0.00	0.00	0.00
<b>Environment</b>				
Electricity consumption	(GWh)	41	67.5	71
Water consumption – primary activities	(ML)	277	228	271
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	42	67.1	70
Intensity data per tonne treated				
– energy		0.007	0.011	0.013
– water		0.04	0.04	0.051
– greenhouse gas emissions		0.007	0.011	0.013
Number of reportable environmental incidents		0	0	0

**Phoenix (Tailings retreatment)** *continued*

Other salient features	
Status of operation	Retreatment of tailings using spare processing capacity
Life of mine	15 years
Compliance and certification	New order mining right – December 2007 ISO 14001 certification is under consideration – interim focus is on compliance ISO 9001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	86.6	0.28	25	–	–	–	86.6	0.28	25
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	95.4	0.008	792	–	–	–	95.4	0.008	792

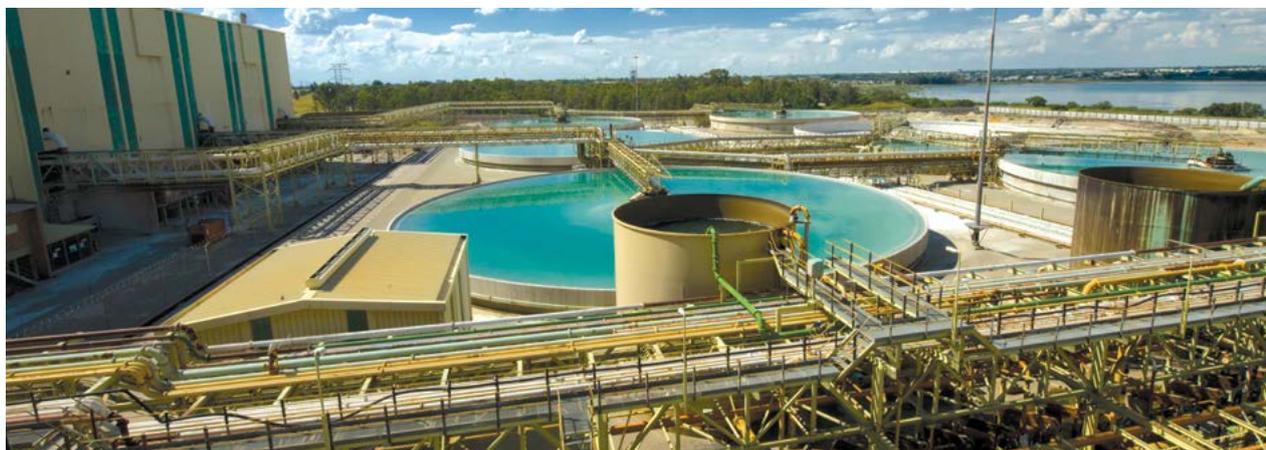
Phoenix is a tailings retreatment operation, situated in Virginia in the Free State Province that makes use of the Saaiplaas plant. During FY13, Harmony finalised an empowerment agreement and transferred 30% of its shareholding in the Phoenix operations to black economic empowerment owners.

Operational success will be secured by maintaining plant efficiency and by reducing pump and pipe failures.

Grade variability and the theft of pipelines and electrical cable are the main risks being managed at Phoenix.

Gold production increased by 4% to 867kg (27 875oz) in FY15. This was due, firstly, to the additional tonnage processed with the toll treatment of material from the surface source clean-up at Central gold plant in the first half of the financial year and, secondly, due to the improvements in recovery from 42.1% to 45.6% of this material, as a result of additional grinding at Central gold plant. Recovered gold grades remained unchanged at 0.14g/t (0.004oz/t). Tonnes milled increased by 3% to 6 245 000t. The increase in gold production and average rand gold price received resulted in an 11% increase in revenue to R396 million (unchanged at US\$35 million).

Year on year cash operating costs increased by 20% to R295 million (increased by 8% to US\$26 million) due to the higher volumes of tonnes processed, the high rate of attrition on pumping equipment experienced at the re-mining pump stations, the surface source clean-up and toll treatment at Central plant.



Phoenix tailings retreatment plant

# OPERATIONAL PERFORMANCE CONTINUED

## Kalgold

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		240	230	246
– Contractors		465	471	390
Total		705	701	636
<b>Operational</b>				
Volumes milled	(000t) (metric)	1 472	1 472	1 398
	(000t) (imperial)	1 623	1 623	1 542
Gold produced	(kg)	1 198	1 162	1 332
	(oz)	38 517	37 358	42 825
Gold sold	(kg)	1 230	1 203	1 263
	(oz)	39 545	38 677	40 607
Grade	(g/t)	0.81	0.79	0.95
	(oz/t)	0.024	0.023	0.028
Productivity	(g/TEC)	183.86	185.15	202.19
<b>Financial</b>				
Revenue	(Rm)	551	522	571
	(US\$m)	48	50	65
Average gold price received	(R/kg)	448 230	433 759	451 856
	(US\$/oz)	1 218	1 303	1 593
Cash operating cost	(Rm)	452	409	384
	(US\$m)	40	39	44
Production profit/(loss)	(Rm)	88	103	215
	(US\$m)	8	10	24
Capital expenditure	(Rm)	41	33	52
	(US\$m)	4	3	6
Cash operating cost	(R/kg)	377 547	351 670	288 147
	(US\$/oz)	1 026	1 057	1 016
All-in sustaining cost	(R/kg)	427 005	397 889	329 652
	(US\$/oz)	1 160	1 196	1 162
<b>Safety</b>				
Number of fatalities		0	0	0
Lost-time injury frequency rate per million hours worked		2.25	0.90	3.87
<b>Environment</b>				
Electricity consumption	(GWh)	40	41	46
Water consumption – primary activities	(ML)	1 795	1 707	1 571
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	41	41	46
Intensity data per tonne treated				
– energy		0.03	0.03	0.033
– water		1.22	1.16	1.12
– greenhouse gas emissions		0.03	0.03	0.033
Number of reportable environmental incidents		1	0	0
<b>Community</b>				
Local economic development	(Rm)	2	7	5
Training and development	(Rm)	4	4	3

**Kalgold** *continued***Other salient features**

Status of operation	Open-pit mining operation
Life of mine	14 years
Compliance and certification	New order mining right – August 2008 ISO 14001 ISO 9001

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	5.8	0.97	6	10.6	1.15	12	16.5	1.08	18
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	6.4	0.028	182	11.7	0.033	393	18.2	0.032	574

Kalgold is an open-pit mine situated 55 kilometres southwest of Mahikeng in North West Province and located within the Kraaipan Greenstone Belt. Mining takes place from the A Zone pit. Ore mined from the pit is processed at a carbon-in-leach plant located at Kalgold.

Success at Kalgold will be ensured by increased tonnes milled, based on the use of additional mobile crushing units to substitute low availability of the plant crusher section. The upgrade of the elution circuit and the replacement of the existing A and B mills, as well as improved safety, will ensure Kalgold's profitability. We will remain focused on managing the mining contract and its sub-contractors, and on commissioning of the in-pit tailings deposition project.

Risks managed at Kalgold include the prevention of plant intrusions and gold theft and the performance of blasting and hauling operations in the pit.

Gold production increased by 3% to 1 198kg (38 517oz) in FY15. This was due primarily to the improvement of 3% in the gold grade recovered to 0.81g/t (3% to 0.024oz/t). Tonnes milled remained unchanged at 1 472 000t. The higher gold production and average rand gold price received resulted in a 6% increase in revenue to R551 million (a 4% increase to US\$48 million).

Cash operating costs rose by 11% to R452 million due to a 51% increase in consumable costs (3% increase to US\$40 million).

Capital expenditure increased by 24% to R41 million (increased by 33% to US\$4 million), due primarily to the replacement of the A and B mills, the establishment of a storm water diversion trench, installation of infrastructure to enable the in-pit deposition of tailings and the elution plant upgrade project.

# OPERATIONAL PERFORMANCE CONTINUED

## PAPUA NEW GUINEA

### Hidden Valley (50%)

		FY15	FY14	FY13
<b>Number of employees</b>				
– Permanent		1 289	1 213	1 107
– Contractors		868	767	996
Total		2 157	1 980	2 013
<b>Operational</b>				
Volumes milled	(000t) (metric)	1 825	2 001	1 844
	(000t) (imperial)	2 012	2 207	2 033
Gold produced	(kg)	2 943	3 292	2 644
	(oz)	94 619	105 840	85 007
Gold sold	(kg)	3 003	3 307	2 622
	(oz)	96 548	106 322	84 299
Grade	(g/t)	1.61	1.65	1.43
	(oz/t)	0.047	0.048	0.042
Productivity	(g/TEC)	228	277	219
<b>Financial</b>				
Revenue	(Rm)	1 346	1 434	1 189
	(US\$m)	118	138	135
Average gold price received	(R/kg)	448 322	433 488	453 482
	(US\$/oz)	1 218	1 303	1 599
Cash operating cost	(Rm)	1 153	1 086	1 150
	(US\$m)	101	105	130
Production profit/(loss)	(Rm)	203	344	44
	(US\$m)	18	33	5
Capital expenditure	(Rm)	121	122	506
	(US\$m)	11	12	57
Cash operating cost	(R/kg)	391 774	329 943	434 796
	(US\$/oz)	1 065	991	1 533
All-in sustaining cost	(R/kg)	514 690	415 068	775 866
	(US\$/oz)	1 395	1 244	2 711
<b>Safety</b>				
Number of fatalities		1	0	0
Lost-time injury frequency rate per million hours worked		4.20	0.00	0.19
<b>Environment</b>				
Electricity consumption	(GWh)	48	42	40
Water consumption – primary activities	(ML)	722	768	699
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	0	0	0
Intensity data per tonne treated				
– energy		0.03	0.02	0.02
– water		0.39	0.38	0.38
– greenhouse gas emissions		0	0	0
Number of reportable environmental incidents		0	1	0
<b>Community</b>				
Local economic development	(Rm)	0	5	14
Training and development	(Rm)	0	19	11

**Hidden Valley (50%)** *continued***Other salient features**

Status of operation	Open-pit mining operation producing gold and silver. A joint venture with Newcrest Mining Limited
Life of mine	3 – 6 years dependent on FY16 performance
Compliance and certification	Mining lease approved by Papua New Guinea authorities; Cyanide Code

**Mineral reserves as at 30 June 2015**

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	1.4	1.11	2	12.0	1.79	22	13.4	1.72	23
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	1.5	0.032	50	13.3	0.052	693	14.8	0.050	743

The Hidden Valley mine is an open pit gold and silver mine, jointly owned and managed as part of the joint venture between Harmony and Newcrest Mining Limited (50:50). The mine is situated in the highly prospective area of the Morobe Province in Papua New Guinea, some 210 kilometres northwest of Port Moresby. The major gold and silver deposits of the Morobe goldfield and Hidden Valley are hosted in the Wau Graben. The Hidden Valley-Kaveroi and Hamata pits, located approximately 6 kilometres apart, are in operation. Ore mined is treated at the Hidden Valley processing plant.

Hidden Valley's operational performance in FY15 was impacted by the failure of the overland conveyer and a safety stoppage as a result of a fatality at the mine.

Restructuring to improve performance is underway. The life of mine has been shortened to three to six years and will be assessed in an on-going manner.

Gold production declined by 11% to 2 943kg (94 619oz) in FY15. This was due primarily to safety stoppages following the fatality in December 2014, replacement of the semi-autogenous grinding mill liners in April 2015 and breakdowns in the overland conveyer. Recovered gold grades decreased by 2% to 1.61g/t (2% to 0.047oz/t) while tonnes milled declined by 9% to 1 825 000t. The decrease in gold production was partially offset by an increase in the average rand gold price received, resulting in a 6% decrease in revenue to R1 346 million (14% to US\$118 million).

Cash operating costs increased by 6% to R1 153 million (decreased by 4% to US\$101 million). Cost reduction initiatives being pursued at the mine include revising the organisational structure. An operational improvement programme has also been launched, with a specific focus on mining and maintenance discipline.

Capital expenditure marginally decreased by 1% to R121 million (decreased by 8% to US\$11 million).

# OPERATIONAL PERFORMANCE CONTINUED

## Metallurgical plants

Harmony has eight metallurgical plants in South Africa and one metallurgical plant in Papua New Guinea. Ore extracted at our mines is crushed and milled and mostly treated by extracting the gold through a carbon-in-leach or carbon-in-pulp circuit process. The gold attached to the carbon is extracted into a solution using an elution process. This gold solution is then treated further to produce rough gold bars (doré) or cathode sludge.

Plant	Type of plant	Processing capacity (tonnes/month) Metric	Average milled for FY15 (tonnes/month) Metric	Processing capacity (tons/month) Imperial	Average milled for FY15 (tons/month) Imperial	Plant recoveries in FY15 (%)
<b>South Africa</b>						
Doornkop plant	Conventional plant <sup>1</sup> , commissioned in 1985	225 000	<b>102 062</b>	248 018	<b>112 503</b>	<b>96.33</b>
Harmony One plant	Conventional plant <sup>1</sup> , commissioned in 1986. Zinc precipitation and smelting to produce doré.	390 000	<b>320 978</b>	429 901	<b>353 818</b>	<b>96.01</b>
Joel plant	Conventional plant <sup>1</sup> , re-commissioned in 2009	80 000	<b>45 912</b>	88 160	<b>50 595</b>	<b>95.33</b>
Kalgold plant	Plant <sup>2</sup>	145 000	<b>122 660</b>	159 834	<b>135 208</b>	<b>82</b>
Kusasaletu plant	Plant <sup>1</sup> , commissioned in 1978, elution plant commissioned in 2013	147 168	<b>75 650</b>	147 168	<b>75650</b>	<b>93.3</b>
Target plant	Plant <sup>1</sup> commissioned in 2002	95 254	<b>82 056</b>	115 742	<b>99 706</b>	<b>95.97</b>
Saaiplaas plant	Commissioned in the late 1950s, since converted to plant <sup>2</sup>	500 000	<b>483 917</b>	551 000	<b>533 276</b>	<b>44.6</b>
Harmony Central plant	Hybrid technology <sup>1,2</sup> commissioned in 1986	150 000	<b>165 919</b>	165 300	<b>182 843</b>	<b>78.11</b>
<b>Papua New Guinea</b>						
Hidden Valley plant	Gold <sup>1</sup> and Merrill Crowe (silver) circuit plant, commissioned in 2009	366 557	<b>303 933</b>	404 060	<b>335 029</b>	<b>Au=87 Ag=71</b>

<sup>1</sup> Carbon-in-pulp

<sup>2</sup> Carbon-in-leach

All the gold production at our South African operations is sent for refining to Rand Refinery, which is owned by a consortium of the major gold producers in South Africa. Harmony holds a 10.38% stake in Rand Refinery. Gold production from our Hidden Valley mine in Papua New Guinea is refined in Australia at an independent refiner, The Perth Mint Australia.

# PROJECTS AND EXPLORATION

## WHY THIS IS MATERIAL TO HARMONY

Sustaining and growing production is key to our long-term strategy. Our current resources are finite and it is essential to have a project pipeline that balances early-stage and more immediate prospects so as to meet our future targets. In addition to production we need to diversify our resource base in order to mitigate our exposure to the counter-cyclical nature of the gold industry.

## OUR APPROACH

Our exploration programme, like our operations, is focused in South Africa and Papua New Guinea. As we already have knowledge of the local geology, government, infrastructure and regulations of these countries, it makes sense to take advantage of this as we expand our project pipeline.

Our exploration strategy targets significant prospective geological regions in these countries to discover large long-life gold and copper-gold ore bodies that will allow us to create value for years to come. An aim of this strategy is to create a balanced exploration portfolio that includes both brownfields and greenfields exploration. Brownfields exploration allows us to maximise value from existing infrastructure by developing mineral resources that sustain our operations. Greenfields exploration, on the other hand, allows us to create new opportunities in highly prospective under-explored mineral provinces and emerging gold districts.

We take a flexible approach to potential exploration projects that include looking at joint ventures, acquisitions and other arrangements. However, all projects undergo a robust assessment to determine whether they meet our exploration standards. The criteria include project- and country-related risk profiles, and minimum requirements on the potential size, production profile and investment targets. In addition, we seek out exploration projects that align with our operational imperatives of prioritising safety, maximising in-ground expenditure and drill testing high-priority targets. In this way we can ensure that future projects, once operational, will enable us to meet our long-term strategic objectives.

## KEY GEOLOGICAL FEATURES OF EXPLORATION AREAS

**Papua New Guinea:** The central belt of rocks that makes up the highland spine of Papua New Guinea formed as a result of subduction related interaction between the Pacific plate (in the north), converging with the Australian plate (in the south). Deposits typical of subduction-related arc settings include:

- Epithermal gold deposits which form at shallow depths, relatively close to the earth's surface, examples of which include Hidden Valley, Hamata, Kerimenge, Wau and Wafi
- Porphyry copper-gold systems which form at deeper levels in the crust associated with the emplacement of intrusive stocks and dykes. Porphyry systems are one of the largest sources of copper ore in the world, and can also contain significant amounts of gold, molybdenum and silver as by-products. Golpu is a high grade porphyry copper-gold system

Harmony have advanced a number of gold and copper-gold prospects and are at various stages of exploration and evaluation across Harmony's lease areas in Papua New Guinea. These include the Kili Teke prospect.

**South Africa:** All of our underground mines are in the Witwatersrand Supergroup. Most of these can be found in the south-western corner of the Witwatersrand Basin or Free State goldfields, which comprise sedimentary rocks that are deep and extend for hundreds of kilometres into the West Rand goldfields and West Wits Basin. The Kraaipan Greenstone Belt can be found further north-west where we have an open pit operation.

## ACTIONS IN 2015

In FY15, we spent R385million (US\$34 million) (FY14: R460 million, US\$45 million) in total on brownfields and greenfields exploration including amounts capitalised. Of this, 98% was spent in Papua New Guinea. The Harmony board approved the updated Golpu prefeasibility study in December 2014 and as a result started capitalising project and evaluation expenditure for the Golpu project (R119 million (US\$10 million) was capitalised in FY15). There was an overall net reduction in total exploration expenditure year on year, largely driven by the decline in the dollar gold price. The major portion of exploration spend in Papua New Guinea was directed at advancing the feasibility studies to turn the world-class Golpu copper-gold deposit to account. R86 million (US\$7.5 million) or 24% of the Papua New Guinea exploration programme was directed to greenfields exploration which produced some highly significant porphyry copper-gold intercepts at the Kili Teke prospect.

# PROJECTS AND EXPLORATION CONTINUED

In the continued low gold price environment, coupled with increasing cost pressures, the key challenge remains to develop high margin reserve ounces to replace depletion. On this basis the key principles underpinning the FY15 exploration programme remained:

- Reduced overall exploration spend
- Advance the high-grade Golpu porphyry copper-gold deposit to feasibility study phase and underground access (advanced exploration activity)
- Turnover and rationalisation of the tenement package to keep focus on the most prospective targets

In line with our core operating capability in the region, Harmony closely monitors the environment for new opportunities that would enhance the project portfolio. With the sustained low commodity prices, tenure over highly prospective target areas in Papua New Guinea is becoming available.

## NOTEWORTHY ACTIONS

FY15 highlights and milestones achieved as a result of the exploration expenditure and work programme in Papua New Guinea include:

- Completion of the optimised prefeasibility study for the Golpu project
- Discovery of highly significant copper-gold mineralisation at the Kili Teke prospect in the Hela province in Papua New Guinea
- Further rationalisation of the greenfield tenement package

### Advancement of the Golpu project:

- Completed a revised prefeasibility study for a stage 1 development targeting the upper higher value portion of the ore body. Refer [www.harmony.co.za](http://www.harmony.co.za):
  - “Harmony’s Golpu project to proceed to feasibility” – announced on 15 December 2014
- Completed concept study for second stage mine development (stage 2) to develop the resource further
- Commenced feasibility studies for the stage 1 mine development as well as engineering and environmental studies to permit early commencement of underground access to the ore body
  - Stage 2B environmental permitting for advanced exploration access was obtained

### Project turnover and development:

- Drilling at the Kili Teke prospect in the Hela Province on tenement EL2310, has delivered some highly significant intersections of copper and gold mineralisation.
- The project continues to shape up as a significant new copper-gold discovery. Refer [www.harmony.co.za](http://www.harmony.co.za):
  - “Harmony intersects highly significant copper-gold mineralisation in Papua New Guinea exploration programme” – announced on 11 March 2015
  - “Superb exploration results from Harmony’s Kili Teke prospect” – announced post year-end on 30 July 2015
- Milne Bay Province tenement EL2316 prospectivity downgraded and surrendered.
- Application EL2386 in the Lalabu-Pangia district of the Southern Highlands lodged to secure priority to tenure to the historic Poru prospect
- A major prospectivity review of the Morobe joint venture tenure commenced with relinquishment of a number of peripheral target areas including EL1985, EL1629, and EL1193
- Morobe exploration activities were restructured and Harmony, through its 100%-owned subsidiary, Harmony Gold Exploration (PNG) Limited, was appointed to manage the exploration programme on behalf of the joint venture

### Greenfield tenement rationalisation:

- Harmony (100%) tenement holding reduced 9% to 1 023km<sup>2</sup> (FY14: 1 125.5km<sup>2</sup>)
- Joint venture (Harmony 50%) tenement holding reduced 39% to 1 245km<sup>2</sup> (FY14: 2 057km<sup>2</sup>)
  - Harmony now undertakes exploration on behalf of the joint venture owners (Newcrest 50%; Harmony 50%) which has simplified the joint venture’s organisational structure and achieved further cost reductions

## PAPUA NEW GUINEA EXPLORATION PROJECTS

Papua New Guinea is one of the world's most prospective yet underexplored terrains for porphyry copper-gold and epithermal gold mineralisation. The New Guinea mobile belt which spans the core of the Irian Jaya – Papua New Guinea mainland, is host to a number of world class porphyry copper-gold and gold deposits including Golpu (Cu-Au), Ok Tedi (Cu-Au), Grasberg (Cu-Au), and Porgera (Au).

Harmony began actively exploring in Papua New Guinea in 2003. We have developed a small but high quality project portfolio, in both established mineral provinces and emerging gold and copper districts:

### Morobe Exploration Joint Venture (50%)

The Morobe Exploration Joint Venture refers to a key strategic tenement holding in the Morobe Province that encompasses the Hidden Valley operation and Golpu project. The tenement package is held jointly (50:50) between Harmony and Newcrest Mining Limited.

The Morobe exploration strategy is to manage a portfolio pipeline of projects to develop bulk tonnage (~1 Moz) or high margin gold or copper-gold targets that provide new stand-alone opportunities or resource options to compliment the operations at Hidden Valley, or at the Golpu project. However, the on-going programme was curtailed during the year in favor of a major prospectivity review to ensure that reduced expenditure levels required by the Morobe joint venture partners are directed appropriately at the most prospective targets.

During FY15, we spent R12.2 million (US\$1.1 million) (FY14: R42 million (US\$4 million)) on exploration in the area. This represents Harmony's share which is 50% of the total work programme expenditure.

A reduced budget of R7.6 million (US\$0.7 million) (50% to Harmony) has been allocated for FY16. The budget allows the Morobe joint venture titles to be maintained in good standing in conjunction with field work to generate drill targets on the highest priority targets.

### Harmony Gold Exploration (Papua New Guinea) Limited (100%)

Harmony holds a 100% interest in 1 023km<sup>2</sup> (FY14: 1 125.5km<sup>2</sup>) of exploration tenure in the Highlands region of Papua New Guinea. The tenement package comprises two titles, one active exploration license (EL2310) and one exploration license application (EL2386). R87 million (US\$7.5 million) was spent in FY15 (FY14: R63 million (US\$6 million)) which was focused almost entirely on developing and drill testing the Kili Teke Project on EL2310.

The drilling has been highly successful with a number of significant copper-gold intercepts obtained (outlined in more detail below). Based on these drill results, an FY16 budget of R86 million has been earmarked for infill and extension drilling to progress the Kili Teke mineralisation to an inferred resource. The Kili Teke prospect has the potential to develop into a major new copper-gold discovery which further highlights the prospectivity of this world-class mineral province.

The case for exploration investment in Papua New Guinea is strong. The country is hugely prospective, under-explored, and has a stable and transparent regulatory environment that promotes and supports mining investment. In addition, Harmony has an established track record of discovery and adding value through cost effective exploration:

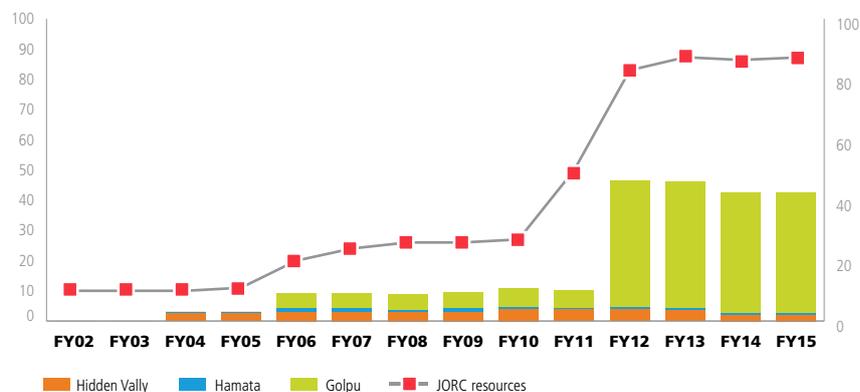
- Since 2003, resource growth attributed from the Morobe joint venture comprises 12.5Moz of gold and 4.7 million tonnes of copper (38.5Moz gold equivalent)
- Discovery cost on a per ounce equivalent basis is less than US\$10, among the best in the world

This growth, in both gold and copper resources, appears set to continue on a 100% basis, as the Kili Teke prospect advances from first pass exploration drilling into resource definition.

# PROJECTS AND EXPLORATION CONTINUED

## Resource gold equivalent<sup>1, 2</sup>

Million ounces



<sup>1</sup> Resource gold equivalent totals based on US\$1 430/oz Au, US\$3.50/lb Cu, US\$30/oz Ag with 100% recovery assumed for all metals, reserve gold equivalent totals based on US\$1 230/oz Au, US\$3.10/lb Cu, US\$18/oz Ag, recoveries are based on recovery curve information built into the profit algorithms used to generate the reserve figures.

<sup>2</sup> Morobe Mining Joint Ventures resources and reserves – expressed as 100%

The underlying strategy of the Papua New Guinea exploration and mine development programme and progress during the year are summarised below:

### Morobe Mining Joint Ventures tenements (50%)

Project description	Target	Progress in FY15	Targets/plans for FY16
<b>Golpu</b>	Development of the Golpu deposit, a world-class copper-gold porphyry resource, into a mine with more than 25 years of low-cost copper and gold production.	Completed an updated prefeasibility study (refer to <a href="https://www.harmony.co.za/our-business/exploration/golpu-updated-prefeasibility-results">https://www.harmony.co.za/our-business/exploration/golpu-updated-prefeasibility-results</a> ) for a Golpu Stage 1 development targeting the higher value portion of the ore body. Completed a concept study for a second stage mine development (Stage 2). Commenced feasibility studies for the Stage 1 mine development as well as engineering and environmental studies to permit early commencement of underground access to the ore body.	<ul style="list-style-type: none"> <li>Complete feasibility study for the stage 1 mine development and a prefeasibility study for stage 2</li> <li>Commence advanced exploration activity including underground access to the Golpu ore body</li> <li>Continue engineering and environmental studies to enable permitting of project construction</li> </ul>
	Wafi transfer zone – greenfields exploration targeting discovery of additional resources to expand Golpu into a mineral district	Validation mapping and revised detail geological compilation completed for the Wafi Transfer and integration with geophysical, geochemical datasets to prioritise targets. A number of tenements surrendered including EL1985 and EL1629.	<ul style="list-style-type: none"> <li>Nambonga North, together with a number of geophysical targets highlighted for field work to develop to drill testing</li> </ul>

**Morobe Mining Joint Ventures tenements (50%)** *continued*

Project description	Target	Progress in FY15	Targets/plans for FY16
<b>Hidden Valley district</b>	Brownfields exploration in a 10km radius of the Hidden Valley plant to develop replacement resources and support expansion.	<p>A seamless regional geology interpretation completed and integrated with all available geochemical and geophysical data. The compilation provides the framework for ranking targets.</p> <p>EL1193 was surrendered after prospectivity was downgraded.</p> <p>Three holes (288 metres) completed at 11 Peg Prospect which returned sporadic anomalous gold results.</p>	<ul style="list-style-type: none"> <li>Field reconnaissance and prospect development work on high priority targets in the Historic Wau mining district</li> <li>Follow up on radiometric targets identified north and west of Hamata Pit</li> <li>Prospect development work at Target 3 approximately 5km southwest of Wau</li> <li>Compilation of results in context with regional datasets. No further work planned at this stage</li> </ul>

**Harmony Papua New Guinea tenements (100%)**

Project description	Target	Progress in FY15	Targets/plans for FY16
<b>Kili Teke prospect</b>	Targeting copper-gold porphyry.	<p>A rigorous field programme of detailed mapping and sampling was undertaken during the year, in order to advance Kili Teke to drill testing phase. Preliminary social mapping, together with baseline monitoring of water quality of the local streams, was also established in the early stages of the field programme.</p> <p>By November 2014, results had outlined four potential high-grade drill targets to be tested.</p> <p>Subsequent drill testing comprised 10 holes for 5 169m. All but one hole were drilled at the Central Mineralised Porphyry zone. Results included several highly significant intercepts:</p> <ul style="list-style-type: none"> <li>KTDD007: 422m @ 0.55% Cu, 0.43g/t Au, from 131m</li> <li>Including 202m @ 0.74% Cu, 0.57g/t Au, from 137m</li> <li>KTDD013: 480m @ 0.63% Cu, 0.44g/t Au from 90m (partial result)</li> <li>Including: 186m @ 1.02% Cu, 0.72g/t Au from 252m</li> </ul> <p>By July 2015, results had outlined a mineralised footprint, (defined by the 0.2% copper envelope) in excess of 600m long, 200m wide and extending at depth in excess of 700m. The mineralised zone remains open ended along strike, and at depth.</p>	<ul style="list-style-type: none"> <li>Infill and extension drilling at the Central Mineralised porphyry target to define resources</li> <li>Complete first pass drill testing of remaining targets including Ieru porphyry, transfer zone porphyry, and Gold Ridge anomaly</li> </ul>

# PROJECTS AND EXPLORATION CONTINUED

## Harmony Papua New Guinea tenements (100%)

Project description	Target	Progress in FY15	Targets/plans for FY16
<b>Project generation</b>	Develop a project pipeline capable of delivering additional quality resources to sustain growth and regional operations.	Monitoring tenements with ELA2836 pegged to secure priority to the Poru prospect area.  Magavara EL2316 surrendered after detailed historic data review.	<ul style="list-style-type: none"> <li>Progress EL2386 Poru project</li> </ul>

## South Africa

Project description	Target	Progress in FY15	Targets/plans for FY16
<b>Joel North</b>	Mining down to 137 level.	Infrastructural development on 129 level was completed and the declines have continued to 137 level. Equipping of the conveyor decline has begun.	<ul style="list-style-type: none"> <li>Start of lateral development on 137 level and completion of the equipping of the conveyor decline</li> </ul>
<b>Central plant tailings reclamation</b>	Reclaim material from FSS5 tailings facility and process it in central plant (to be converted for tailings re-treatment) at 300 000 tonnes per annum. Central plant operation will be similar to the highly profitable Phoenix operation, which has been in operation since 2007.	The feasibility study was completed as planned and the project obtained technical approval. Funding options are being investigated.	<ul style="list-style-type: none"> <li>Implementation of the project as soon as funding has been allocated</li> </ul>
<b>White Rivers Exploration – Beisa Project Joint Venture</b>	The main objective of this exploration joint venture is to explore and develop potential gold resources at White Rivers Exploration (Pty) Limited's Beisa Project and abutting exploration areas within Harmony's adjacent Target Complex	Under the terms of the Agreement, White Rivers and Harmony (through Loraine Gold Mines Limited and Avgold Limited) will have an initial and fixed 65% and 35% interest respectively in the exploration joint venture, with White Rivers funding and managing exploration activities to prefeasibility study level.  The initial exploration activities, which comprise of collation of historical data, interpretation and verification of data, and geological modelling are in progress.	<ul style="list-style-type: none"> <li>Good progress is being made and an initial resource is expected to be declared during FY16</li> <li>Scoping and prefeasibility study to commence</li> </ul>

# RESOURCES AND RESERVES

## MINERAL RESOURCES AND RESERVES – A SUMMARY

Harmony's statement of mineral resources and mineral reserves as at 30 June 2015 is produced in accordance with the South African Code for the Reporting of Mineral Resources and Mineral Reserves and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. It should be noted that the mineral resources are reported inclusive of the mineral reserves. The detailed mineral resources and reserves statement is available on our company website, [www.harmony.co.za](http://www.harmony.co.za).

Harmony uses certain terms in the summary such as 'measured', 'indicated' and 'inferred' resources, which the United States' Securities and Exchange Commission guidelines strictly prohibit companies registered in the United States from including in their filings with the commission. United States investors are urged to consider the disclosure in this regard in our Form 20-F which is available on our website at [www.harmony.co.za/investors/reporting/20f](http://www.harmony.co.za/investors/reporting/20f).

## HARMONY – TOTAL

The company's attributable gold equivalent mineral resources were declared as 110.3Moz as at 30 June 2015, an 18% decrease year on year from the 133.8Moz declared at 30 June 2014. The total gold contained in mineral resources at the South African operations represented 63.5% of the company's total mineral resource, with the Papua New Guinea operations representing 36.5% of Harmony's total gold and gold equivalent mineral resources as at 30 June 2015.

As at 30 June 2015, Harmony's attributable gold and gold equivalent mineral reserves amounted to 42.6Moz of gold, a 14% decrease from the 49.5Moz declared at 30 June 2014. The gold reserve ounces in South Africa represent 51.9% while the Papua New Guinea gold and gold equivalent ounces represent 48.1% of Harmony's total mineral reserves as at 30 June 2015.

## SOUTH AFRICA

### South African underground operations

The company's mineral resources at the South African underground operations as at 30 June 2015 totalled 60.6Moz (217.2Mt at 8.68g/t), a decrease of 27% year on year from the 83.3Moz declared as at 30 June 2014. This decrease is due to depletion by mining during the year, the exclusion of Freddie's 9 shaft and downscaling at Masimong.

The company's mineral reserves at the South African underground operations as at 30 June 2015 totalled 15.0Moz (80.3Mt at 5.82g/t), a decrease of 25% year on year from the 19.9Moz declared as at 30 June 2014. The decrease is due to depletion by mining during the year, the placing of Target 3 on care and maintenance and changes to the life-of-mine profile at various operations.

### South African surface operations, including Kalgold

The company's mineral resources at its South African surface operations as at 30 June 2015 totalled 9.5Moz (1 082.3Mt at 0.27g/t), a decrease of 1% year on year from the 9.6Moz declared as at 30 June 2014. This decrease is due to depletion by mining and the exclusion of surface sources at Joel.

The company's mineral reserves at its South African surface operations as at 30 June 2015 totalled 7.1Moz (835.9Mt at 0.26g/t), a decrease of 12% year on year from the 8.0Moz declared at 30 June 2014. The decrease is due to depletion by mining and the exclusion of surface sources at Joel.

# RESOURCES AND RESERVES CONTINUED

## PAPUA NEW GUINEA

### Papua New Guinea operations

The company's attributable mineral resources (including gold and gold equivalents) at its Papua New Guinea operations as at 30 June 2015 totalled 40.2Moz, a decrease of 2% year on year from the 40.9Moz declared as at 30 June 2014. This decrease is due to depletion by mining during the year and to changes to the open-pit spatial constraint at Hidden Valley.

The company's mineral reserves at its Papua New Guinea operations as at 30 June 2015 totalled 20.5Moz, a decrease of 5% year on year from the 21.5Moz declared as at 30 June 2014. The decrease is due to depletion by mining during the year and changes to the life-of-mine profile at Hidden Valley. The reserves that we declared for Golpu are based on the prefeasibility study completed in 2012. During December 2014, Harmony released the results of an updated prefeasibility study with respect to the Golpu project. Please refer to our website ([www.harmony.co.za/our-business/exploration/golpuupdated-prefeasibility-results](http://www.harmony.co.za/our-business/exploration/golpuupdated-prefeasibility-results)) for details. The Golpu project's reserves will be updated again once the feasibility study for stage 1 and the prefeasibility study for stage 2 have been completed. These studies are expected to be completed by the end of December 2015.

### ASSUMPTIONS

In converting mineral resources to mineral reserves, the following commodity prices and exchange rates were applied:

- A gold price of US\$1 230/oz
- An exchange rate of US\$/ZAR11.38
- The above parameters resulted in a rand gold price of R450 000/kg for the South African assets
- The Hidden Valley mine and Golpu project in the Morobe Mining Joint Ventures used commodity prices of US\$1 250/oz Au, US\$20/oz Ag, US\$10/lb Mo and US\$3.10/lb Cu at an exchange rate of US\$0.85 per A\$
- Gold equivalent ounces are calculated assuming US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag, and assuming 100% recovery for all metals. These are the same assumptions as those used in the 2012 prefeasibility study for the calculation of gold equivalent ounces.

### AUDITING

Harmony's South African mineral resources and mineral reserves have been comprehensively audited by a team of internal competent persons that functions independently of the operating units. The internal audit team verifies compliance with the Harmony code of resource blocking, valuation, resource classification, cut-off calculations, development of life-of-mine plans and the compliance of statements with the South African Code for the Reporting of Mineral Resources and Mineral Reserves (SAMREC) from each operation and project that support Harmony's annual mineral resources and mineral reserves declaration. This audit process is specifically designed to comply with the requirements of internationally recognised procedures and standards such as:

- The South African Code for Reporting Mineral Resources and Mineral Reserves
- Industry Guide 7 of the United States Securities and Exchange Commission
- Sarbanes-Oxley requirements in the United States
- The Australian Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (JORC) which complies with South African Code for the Reporting of Mineral Resources and Mineral Reserves

Harmony's South African mineral resources and reserves were reviewed by SRK Consulting Engineers and Scientists for compliance with the South African Code for the Reporting of Mineral Resources and Mineral Reserves. The mineral resources and reserves of the Papua New Guinea assets were reviewed by AMC Consultants Pty Ltd for compliance with the standards set out in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

### COMPETENT PERSON'S DECLARATION

In South Africa, Harmony employs an ore reserve manager at each of its operations who takes responsibility for the compilation and reporting of mineral resources and mineral reserves at their operations. In Papua New Guinea, competent persons are appointed for the mineral resources and mineral reserves for specific projects and operations.

These competent persons, who are full-time employees of Harmony, consent to the inclusion in the report of the matters based on the information in the form and context in which it appears.

The mineral resources and mineral reserves in this report are based on information compiled by the following competent persons:

- **Resources and reserves of South Africa:**

Jaco Boshoff, BSc (Hons), MSc, MBA, Pr. Sci. Nat, MSAIMM, MGSSA, who has 20 years' relevant experience, is registered with the South African Council for Natural Scientific Professions (SACNASP) and is a member of the South African Institute of Mining and Metallurgy (SAIMM).

Mr Boshoff is Harmony's Lead Competent Person.

**Jaco Boshoff**

23 October 2015

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1760  
South Africa

- **Resources and reserves of Papua New Guinea:**

Gregory Job, BSc, MSc, who has 27 years' relevant experience and is a member of the Australian Institute of Mining and Metallurgy (AusIMM).

**Greg Job**

23 October 2015

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Postal address:

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Queensland 4064  
Australia

## ADMINISTRATIVE INFORMATION FOR PROFESSIONAL ORGANISATIONS

### The Australasian Institute of Mining and Metallurgy (AusIMM)

PO Box 660, Carlton South, Vic 3053, Australia

Telephone: +61 3 9658 6100; Facsimile: +61 3 9662 3662

[www.ausimm.com.au](http://www.ausimm.com.au)

### South African Council for Natural Scientific Professions (SACNASP) – The legislated regulatory body for natural science practitioners in South Africa

Private Bag X540, SILVERTON, 0127, Gauteng Province, South Africa

Telephone: +27 (12) 841-1075; Facsimile: +27 (086) 206-0427

[www.sacnasp.org.za](http://www.sacnasp.org.za)

### The Southern African Institute of Mining and Metallurgy (SAIMM)

P.O. Box 61127, Marshalltown, 2107, Gauteng Province, South Africa

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## ENVIRONMENTAL MANAGEMENT AND FUNDING

Harmony's environmental strategy aims to optimise our environmental performance by managing our environmental impacts, focusing on effective risk controls, reducing environmental liabilities, ensuring responsible stewardship of our products within our scope of influence, complying with environmental legislation and regulations. For further information regarding Harmony's approach to Environmental Performance refer to page 100.

# RESOURCES AND RESERVES CONTINUED

Details relating to the provision for environmental rehabilitation and funding can be found in note 24 in Harmony's audited annual financial statements which are available in a separate report, the Financial Report 2015, which is also available online at [www.har.co.za/14/HAR-FR15.pdf](http://www.har.co.za/14/HAR-FR15.pdf).

## LEGAL ENTITLEMENT TO MINERALS REPORTED

Harmony's South Africa operations operate under new order mining rights in terms of the Minerals and Petroleum Resources Development of Act of 2002 (Act No. 28, of 2002) (MPRDA). In Papua New Guinea, Harmony operates under the Independent State of Papua New Guinea Mining Act 1992. All required operating permits have been obtained, and are in good standing. The legal tenure of each operation and project has been verified to the satisfaction of the accountable Competent Person.

## RECONCILIATION

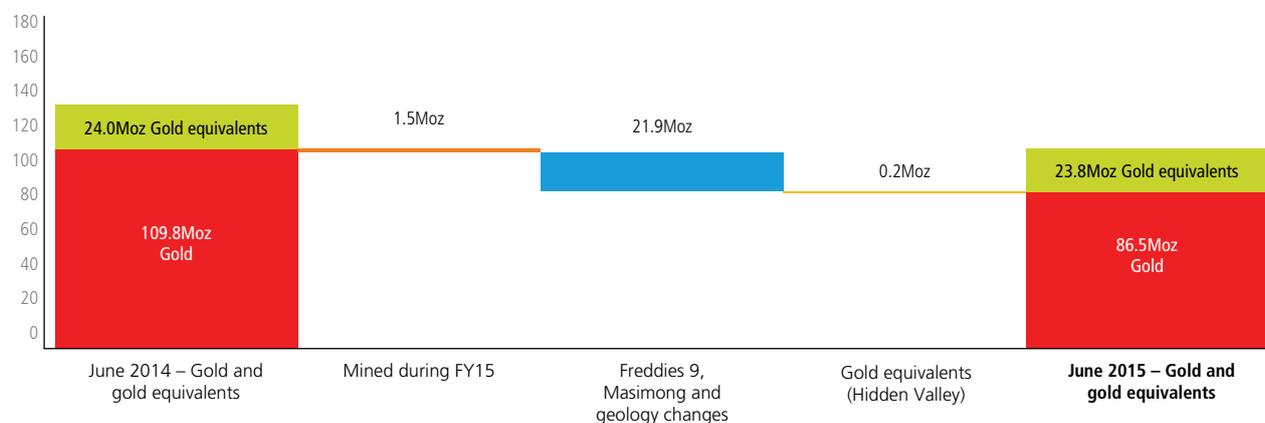
### Mineral resources

As at 30 June 2015, attributable gold equivalent mineral resources were 110.3Moz, down from 133.8Moz in June 2014. The following table and graph show the year on year reconciliation of the mineral resources.

Gold and gold equivalent mineral resources reconciliation	Tonnes	Moz
June 2014 – gold and gold equivalents	<b>4 160</b>	<b>133.8</b>
<b>Reductions</b>		
Mined during FY15	(45)	(1.5)
Freddies 9, Masimong and geology changes	(680)	(21.9)
Gold equivalents	(5)	(0.2)
<b>June 2015 – gold and gold equivalents</b>	<b>3 430</b>	<b>110.3</b>

### Mineral resources reconciliation (Moz)

FY14 vs FY15



Kalgold pit mining

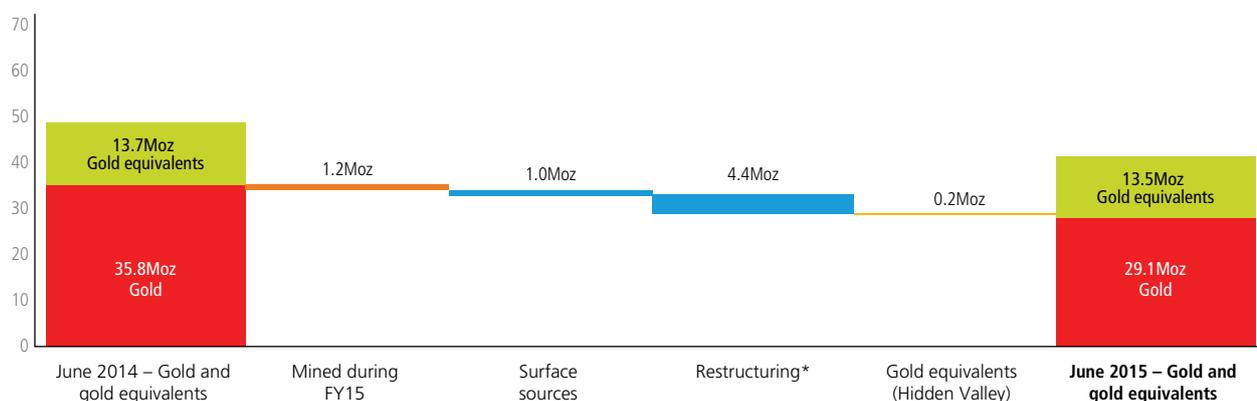
## Mineral reserves

As at 30 June 2015, Harmony's attributable gold equivalent mineral reserves were 42.6Moz, down from 49.5Moz. The year on year mineral reserves reconciliation is shown below.

Gold and gold equivalent mineral resources reconciliation	Tonnes	Moz
June 2014 – gold and gold equivalents	1 538	49.5
<b>Reductions</b>		
Mined during FY15	(38)	(1.2)
Surface sources	(31)	(1.0)
Restructuring (Hidden Valley, Kusasaletu, Doornkop, Masimong and closure of Target 3)	(137)	(4.4)
Gold equivalents	(7)	(0.2)
<b>June 2015 – gold and gold equivalents</b>	<b>1 325</b>	<b>42.6</b>

### Mineral reserves reconciliation (Moz)

FY14 vs FY15



\* Restructuring of Hidden Valley, Kusasaletu, Masimong, Doornkop and the closure of Target 3



Rock samples from Bambanani

# RESOURCES AND RESERVES CONTINUED

## MINERAL RESOURCES STATEMENT (METRIC)

Gold	Measured resources			Indicated resources			Inferred resources			Total mineral resources		
	Tonnes (Mt)	Grade (g/t)	Gold (000oz)	Tonnes (Mt)	Grade (g/t)	Gold (000oz)	Tonnes (Mt)	Grade (g/t)	Gold (000oz)	Tonnes (Mt)	Grade (g/t)	Gold (000oz)
<b>South Africa underground</b>												
<b>Free State</b>												
Bambanani	1.3	15.50	632	–	–	–	–	–	–	1.3	15.50	632
Joel	4.4	8.12	1 157	7.0	7.59	1 706	1.1	7.03	242	12.5	7.73	3 105
Masimong	5.8	8.46	1 579	2.7	7.63	668	5.2	8.96	1480	13.7	8.48	3 727
Phakisa	8.4	10.30	2 786	11.6	11.60	4 337	24.1	9.21	7143	44.2	10.05	14 267
Target 1	9.0	7.42	2 158	11.1	7.54	2 700	4.2	5.55	742	24.3	7.16	5 599
Target 2												
Target 3	7.0	9.10	2 057	4.7	7.10	1 063	–	–	–	11.7	8.31	3 119
Freddies 9												
Tshepong	17.9	11.53	6 623	4.5	9.28	1 331	6.2	8.60	1712	28.5	10.54	9 666
Unisel	7.4	6.87	1637	6.3	6.95	1 400	4.1	8.59	1135	17.8	7.29	4171
<b>Total Free State underground</b>	<b>61.3</b>	<b>9.46</b>	<b>18 629</b>	<b>47.9</b>	<b>8.58</b>	<b>13 204</b>	<b>44.8</b>	<b>8.65</b>	<b>12 453</b>	<b>153.9</b>	<b>8.95</b>	<b>44 286</b>
<b>West Rand</b>												
Doornkop South Reef	3.0	7.28	705	7.1	7.56	1 736	22.6	6.82	4 966	32.8	7.03	7 407
Doornkop Main Reef	0.08	5.38	14	0.04	5.51	8	0.02	5.32	3	0.1	5.41	25
<b>Total</b>	<b>3.1</b>	<b>7.23</b>	<b>719</b>	<b>7.2</b>	<b>7.55</b>	<b>1 745</b>	<b>22.7</b>	<b>6.82</b>	<b>4 969</b>	<b>32.9</b>	<b>7.02</b>	<b>7 432</b>
Kusasaletu	7.2	11.04	2 563	21.4	8.47	5 843	1.7	9.05	483	30.3	9.12	8 890
<b>Total West Rand</b>	<b>10.3</b>	<b>9.90</b>	<b>3 282</b>	<b>28.6</b>	<b>8.24</b>	<b>7 588</b>	<b>24.3</b>	<b>6.97</b>	<b>5 452</b>	<b>63.3</b>	<b>8.02</b>	<b>16 322</b>
<b>Total South Africa underground</b>	<b>71.6</b>	<b>9.52</b>	<b>21 911</b>	<b>76.5</b>	<b>8.45</b>	<b>20 792</b>	<b>69.1</b>	<b>8.06</b>	<b>17 905</b>	<b>217.2</b>	<b>8.68</b>	<b>60 608</b>
<b>South Africa surface</b>												
<b>Kraaipan Greenstone Belt</b>												
Kalgold	12.8	0.80	328	15.5	0.98	486	9.2	1.18	351	37.5	0.97	1164
<b>Total Kalgold tailings dam</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>23.6</b>	<b>0.26</b>	<b>200</b>	<b>23.6</b>	<b>0.26</b>	<b>200</b>
<b>Free State Region – surface</b>												
Free State (Phoenix)	86.6	0.28	792	–	–	–	–	–	–	86.6	0.28	792
Free State (St Helena)	258.7	0.27	2230	–	–	–	–	–	–	258.7	0.27	2 230
Free State (other):												
– Waste rock dumps	–	–	–	3.9	0.51	65	23.8	0.42	323	27.7	0.43	387
– Slimes dams	–	–	–	632.8	0.23	4585	15.5	0.19	94	648.2	0.22	4 680
– Subtotal	–	–	–	636.7	0.23	4650	39.2	0.33	417	675.9	0.23	5 067
<b>Total Free State</b>	<b>345.2</b>	<b>0.27</b>	<b>3 023</b>	<b>636.7</b>	<b>0.23</b>	<b>4 650</b>	<b>39.2</b>	<b>0.33</b>	<b>417</b>	<b>1 021.2</b>	<b>0.25</b>	<b>8 090</b>
<b>Total South Africa surface (including Kalgold)</b>	<b>358.0</b>	<b>0.29</b>	<b>3 350</b>	<b>652.2</b>	<b>0.24</b>	<b>5 136</b>	<b>72.0</b>	<b>0.42</b>	<b>968</b>	<b>1 082.3</b>	<b>0.27</b>	<b>9 454</b>
<b>Total South Africa</b>	<b>429.6</b>		<b>25 261</b>	<b>728.7</b>		<b>25 928</b>	<b>141.1</b>		<b>18 873</b>	<b>1 299.5</b>		<b>70 062</b>
<b>Papua New Guinea <sup>1</sup></b>												
Hidden Valley	1.4	1.11	50	38.5	1.57	1 948	1.1	1.33	46	41.0	1.55	2 044
Hamata	0.2	1.09	6	1.6	2.16	111	0.09	1.82	5	1.8	2.05	122
Wafi	–	–	–	56.7	1.72	3 146	11.3	1.30	475	68.1	1.65	3 621
Golpu	–	–	–	428.2	0.61	8 434	108.7	0.48	1 669	536.9	0.59	10 103
Nambonga	–	–	–	–	–	–	19.9	0.79	505	19.9	0.79	505
<b>Total Papua New Guinea</b>	<b>1.6</b>	<b>1.11</b>	<b>56</b>	<b>525.0</b>	<b>0.81</b>	<b>13 639</b>	<b>141.1</b>	<b>0.60</b>	<b>2 701</b>	<b>667.7</b>	<b>0.76</b>	<b>16 396</b>
<b>Grand total</b>	<b>431.2</b>		<b>25 316</b>	<b>1 253.7</b>		<b>39 567</b>	<b>282.3</b>		<b>21 574</b>	<b>1 967.2</b>		<b>86 458</b>

Gold equivalents <sup>1</sup>	Measured resources		Indicated resources		Inferred resources		Total mineral resources	
	Tonnes (Mt)	Au eq (000oz)	Tonnes (Mt)	Au eq (000oz)	Tonnes (Mt)	Au eq (000oz)	Tonnes (Mt)	Au eq (000oz)
<b>Silver</b>								
Hidden Valley	1.4	16	38.5	659	1.1	21	41.0	696
<b>Total</b>	<b>1.4</b>	<b>16</b>	<b>38.5</b>	<b>696</b>	<b>1.1</b>	<b>21</b>	<b>41.0</b>	<b>696</b>
<b>Copper</b>								
Golpu	–	–	428.2	19 521	108.7	3 416	536.9	22 937
Nambonga	–	–	–	–	19.9	204	19.9	204
<b>Total</b>	<b>–</b>	<b>–</b>	<b>428.2</b>	<b>19 521</b>	<b>128.6</b>	<b>3 620</b>	<b>556.8</b>	<b>23 141</b>
<b>Total silver and copper as gold equivalents</b>	<b>1.4</b>	<b>16</b>	<b>466.7</b>	<b>20 180</b>	<b>129.7</b>	<b>3 641</b>	<b>597.8</b>	<b>23 837</b>
<b>Total Papua New Guinea including gold equivalents</b>	<b>1.6</b>	<b>72</b>	<b>525.0</b>	<b>33 819</b>	<b>141.1</b>	<b>6 342</b>	<b>667.7</b>	<b>40 232</b>
<b>Total Harmony including gold equivalents</b>	<b>431.2</b>	<b>25 332</b>	<b>1 253.7</b>	<b>59 747</b>	<b>282.3</b>	<b>25 215</b>	<b>1 967.2</b>	<b>110 294</b>

### Other metals

Papua New Guinea <sup>1</sup>	Tonnes (Mt)	Grade (g/t)	Ag (000oz)	Tonnes (Mt)	Grade (g/t)	Ag (000oz)	Tonnes (Mt)	Grade (g/t)	Ag (000oz)	Tonnes (Mt)	Grade (g/t)	Ag (000oz)
	<b>Silver</b>											
Hidden Valley	1.4	20.40	917	38.5	29.80	36 880	1.1	33.34	1162	41.0	29.57	38 959
Golpu	–	–	–	428.2	1.14	15 664	108.7	0.88	3 090	536.9	1.09	18 754
Nambonga	–	–	–	–	–	–	19.9	2.87	1 836	19.9	2.87	1 836
<b>Total</b>	<b>1.4</b>	<b>20.40</b>	<b>917</b>	<b>466.7</b>	<b>3.50</b>	<b>52 544</b>	<b>129.7</b>	<b>1.46</b>	<b>6 088</b>	<b>597.8</b>	<b>3.10</b>	<b>59 549</b>

Copper	Tonnes (Mt)	Grade (%)	Cu (Mlb)	Tonnes (Mt)	Grade (%)	Cu (Mlb)	Tonnes (Mt)	Grade (%)	Cu (Mlb)	Tonnes (Mt)	Grade (%)	Cu (Mlb)
	Golpu	–	–	–	428.2	0.93	8 809	108.7	0.64	1 544	536.9	0.87
Nambonga	–	–	–	–	–	–	19.9	0.21	92	19.9	0.21	92
<b>Total</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>428.2</b>	<b>0.93</b>	<b>8 809</b>	<b>128.6</b>	<b>0.58</b>	<b>1 636</b>	<b>556.8</b>	<b>0.85</b>	<b>10 445</b>

Molybdenum	Tonnes (Mt)	Grade (ppm)	Mo (000t)	Tonnes (Mt)	Grade (ppm)	Mo (000t)	Tonnes (Mt)	Grade (ppm)	Mo (000t)	Tonnes (Mt)	Grade (ppm)	Mo (000t)
	Golpu	–	–	–	428.2	98	93	108.7	76	18	536.9	94

South Africa	Tonnes (Mt)	Grade (kg/t)	U <sub>3</sub> O <sub>8</sub> (Mlb)	Tonnes (Mt)	Grade (kg/t)	U <sub>3</sub> O <sub>8</sub> (Mlb)	Tonnes (Mt)	Grade (kg/t)	U <sub>3</sub> O <sub>8</sub> (Mlb)	Tonnes (Mt)	Grade (kg/t)	U <sub>3</sub> O <sub>8</sub> (Mlb)
	<b>Uranium</b>											
<b>Free State underground</b>												
Masimong	–	–	–	6.0	0.28	4	9.1	0.23	5	15.1	0.25	8
Tshepong	6.1	0.20	3	12.8	0.23	6	10.4	0.12	3	29.3	0.18	12
Phakisa	8.4	0.18	3	11.6	0.18	5	24.1	0.08	4	44.2	0.13	12
<b>Total</b>	<b>14.5</b>	<b>0.19</b>	<b>6</b>	<b>30.4</b>	<b>0.22</b>	<b>15</b>	<b>43.6</b>	<b>0.12</b>	<b>12</b>	<b>88.6</b>	<b>0.17</b>	<b>33</b>
<b>Total South Africa underground</b>	<b>14.5</b>	<b>0.19</b>	<b>6</b>	<b>30.4</b>	<b>0.22</b>	<b>15</b>	<b>43.6</b>	<b>0.12</b>	<b>12</b>	<b>88.6</b>	<b>0.17</b>	<b>33</b>
<b>Free State surface</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>174.1</b>	<b>0.10</b>	<b>38</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>174.1</b>	<b>0.10</b>	<b>38</b>
<b>Grand total</b>	<b>14.5</b>	<b>0.19</b>	<b>6</b>	<b>204.6</b>	<b>0.12</b>	<b>53</b>	<b>43.6</b>	<b>0.12</b>	<b>12</b>	<b>262.7</b>	<b>0.12</b>	<b>71</b>

<sup>1</sup> Total attributable gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.50/lb Cu and US\$25.00/oz Ag with 100% recovery for all metals

NB: Rounding of numbers may result in slight computational discrepancies

Note: 1 tonne = 1 000 kg = 2 204 lbs

1 troy ounce = 31.10348 grams

Au = gold Ag = silver Cu = copper U<sub>3</sub>O<sub>8</sub> = uranium Mo = molybdenum  
Moz = million ounces

# RESOURCES AND RESERVES CONTINUED

## MINERAL RESERVES STATEMENT (METRIC)

Gold	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold <sup>2</sup> (000oz)	Tonnes (Mt)	Grade (g/t)	Gold <sup>2</sup> (000oz)	Tonnes (Mt)	Grade (g/t)	Gold <sup>2</sup> (000oz)
<b>South Africa underground</b>									
<b>Free State</b>									
Bambanani	1.6	11.33	565	–	–	–	1.6	11.33	565
Joel	2.0	5.32	347	3.7	5.20	621	5.7	5.24	968
Masimong	1.7	3.87	212	0.2	3.66	23	1.9	3.85	235
Phakisa	6.1	6.61	1 294	2.1	7.49	499	8.2	6.83	1 792
Target 1	3.2	5.45	562	3.8	5.16	625	7.0	5.29	1 187
Target 3									
Tshepong	18.4	5.58	3 294	3.3	4.50	474	21.6	5.42	3 768
Unisel	1.8	4.55	268	0.8	4.33	111	2.6	4.48	380
<b>Total Free State underground</b>	<b>34.8</b>	<b>5.85</b>	<b>6 542</b>	<b>13.8</b>	<b>5.29</b>	<b>2 352</b>	<b>48.6</b>	<b>5.69</b>	<b>8 895</b>
<b>West Rand</b>									
<b>Doornkop</b>									
Doornkop South Reef	1.3	5.00	211	3.8	5.22	636	5.1	5.16	847
Kusasaletu	6.5	6.83	1 419	20.1	5.97	3 856	26.6	6.18	5 274
<b>Total West Rand</b>	<b>7.8</b>	<b>6.52</b>	<b>1 629</b>	<b>23.9</b>	<b>5.85</b>	<b>4 492</b>	<b>31.7</b>	<b>6.01</b>	<b>6 121</b>
<b>Total South Africa underground</b>	<b>42.5</b>	<b>5.97</b>	<b>8 171</b>	<b>37.7</b>	<b>5.65</b>	<b>6 845</b>	<b>80.3</b>	<b>5.82</b>	<b>15 016</b>
<b>South Africa surface</b>									
<b>Kraaipan Greenstone Belt</b>									
Kalgold	5.8	0.97	182	10.6	1.15	393	16.5	1.08	574
<b>Free State – surface</b>									
Free State (Phoenix)	86.6	0.28	792	–	–	–	86.6	0.28	792
Free State (St Helena)	175.9	0.27	1 507	–	–	–	175.9	0.27	1 507
Free State (Other):									
– Waste rock dumps	–	–	–	3.9	0.51	65	3.9	0.51	65
– Slimes dams	–	–	–	553.1	0.23	4 123	553.1	0.23	4 123
– Subtotal	–	–	–	557.0	0.23	4 188	557.0	0.23	4 188
<b>Total Free State</b>	<b>262.5</b>	<b>0.27</b>	<b>2 300</b>	<b>557.0</b>	<b>0.23</b>	<b>4 188</b>	<b>819.4</b>	<b>0.25</b>	<b>6 488</b>
<b>Total South Africa surface (including Kalgold)</b>	<b>268.3</b>	<b>0.29</b>	<b>2 481</b>	<b>567.6</b>	<b>0.25</b>	<b>4 581</b>	<b>835.9</b>	<b>0.26</b>	<b>7 062</b>
<b>Total South Africa</b>	<b>310.8</b>		<b>10 652</b>	<b>605.4</b>		<b>11 425</b>	<b>916.2</b>		<b>22 078</b>
<b>Papua New Guinea<sup>1</sup></b>									
Hidden Valley	1.4	1.11	50	12.0	1.79	693	13.4	1.72	743
Hamata	0.2	1.09	6	1.0	2.36	80	1.2	2.19	85
Golpu	–	–	–	225.0	0.86	6 194	225.0	0.86	6 194
<b>Total Papua New Guinea</b>	<b>1.6</b>	<b>1.11</b>	<b>56</b>	<b>238.1</b>	<b>0.91</b>	<b>6 967</b>	<b>239.6</b>	<b>0.91</b>	<b>7 022</b>
<b>Grand total</b>	<b>312.4</b>		<b>10 708</b>	<b>843.4</b>		<b>18 392</b>	<b>1 155.8</b>		<b>29 100</b>

<sup>1</sup> Total attributable gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag with 100% recovery for all metals

<sup>2</sup> Metal figures are fully inclusive of all mining dilutions and gold losses, and are reported as mill delivered tonnes and head grades. Metallurgical recovery factors have not been applied to the reserve figures

NB: Rounding of numbers may result in slight computational discrepancies

Note: 1 tonne = 1 000 kg = 2 204 lbs

1 troy ounce = 31.10348 grams

Gold equivalents <sup>1</sup>	Proved reserves		Probable reserves		Total mineral reserves	
	Tonnes (Mt)	Au eq <sup>2</sup> (000oz)	Tonnes (Mt)	Au eq <sup>2</sup> (000oz)	Tonnes (Mt)	Au eq <sup>2</sup> (000oz)
<b>Silver</b>						
Hidden Valley	1.4	15	12.0	218	13.4	232
<b>Total</b>	<b>1.4</b>	<b>15</b>	<b>12.0</b>	<b>218</b>	<b>13.4</b>	<b>232</b>
<b>Copper</b>						
Golpu	–	–	225.0	13 265	225.0	13 265
<b>Total</b>	<b>–</b>	<b>–</b>	<b>225.0</b>	<b>13 265</b>	<b>225.0</b>	<b>13 265</b>
<b>Total silver and copper as gold equivalents</b>	<b>1.4</b>	<b>15</b>	<b>237.0</b>	<b>13 482</b>	<b>238.4</b>	<b>13 497</b>
<b>Total Papua New Guinea including gold equivalents</b>	<b>1.6</b>	<b>70</b>	<b>238.1</b>	<b>20 449</b>	<b>239.6</b>	<b>20 519</b>
<b>Total Harmony including equivalents</b>	<b>312.4</b>	<b>10 722</b>	<b>843.4</b>	<b>31 874</b>	<b>1 155.8</b>	<b>42 597</b>

### Other metals

Papua New Guinea <sup>1</sup>	Tonnes	Grade	Ag <sup>2</sup>	Tonnes	Grade	Ag <sup>2</sup>	Tonnes	Grade	Ag <sup>2</sup>
	(Mt)	(g/t)	(000oz)	(Mt)	(g/t)	(000oz)	(Mt)	(g/t)	(000oz)
<b>Silver</b>									
Hidden Valley	1.4	20.40	917	12.0	35.12	13 582	13.4	33.59	14 499
Golpu	–	–	–	225.0	1.36	9 864	225.0	1.36	9 864
<b>Total</b>	<b>1.4</b>	<b>20.40</b>	<b>917</b>	<b>237.0</b>	<b>3.08</b>	<b>23 446</b>	<b>238.4</b>	<b>3.18</b>	<b>24 363</b>

Copper	Tonnes	Grade	Cu <sup>2</sup>	Tonnes	Grade	Cu <sup>2</sup>	Tonnes	Grade	Cu <sup>2</sup>
	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)
Golpu	–	–	–	225.0	1.21	5 992	225.0	1.21	5 992

Molybdenum	Tonnes	Grade	Mo <sup>2</sup>	Tonnes	Grade	Mo <sup>2</sup>	Tonnes	Grade	Mo <sup>2</sup>
	(Mt)	ppm	(Mlb)	(Mt)	ppm	(Mlb)	(Mt)	ppm	(Mlb)
Golpu	–	–	–	225.0	81	40	225.0	81	40

<sup>1</sup> Total attributable gold equivalent ounces are calculated assuming a US\$1400/oz Au, US\$3.50/lb Cu and US\$25.00/oz Ag with 100% recovery for all metals

<sup>2</sup> Metal figures are fully inclusive of all mining dilutions and gold losses, and are reported as mill delivered tonnes and head grades. Metallurgical recovery factors have not been applied to the reserve figures

NB: Rounding of numbers may result in slight computational discrepancies

Note: 1 tonne = 1 000 kg = 2 204 lbs

1 troy ounce = 31.10348 grams

Au = gold Ag = silver Cu = copper Mo = molybdenum

# MINING CHARTER COMPLIANCE

Harmony is a truly empowered company. We report on our performance in relation to the Mining Charter throughout this integrated report. The table below sets out the specific requirements of the Mining Charter and our progress in terms of these requirements. Further information on what we have achieved in relation to the Mining Charter can be found in the Social and ethics committee chairman's report on pages 22 to 24.

## PROGRESS AGAINST MINING CHARTER TARGETS

December 2014 marked the end of the five-year period set for implementation of and compliance with the Mining Charter. The Mining Charter has served as a guide to the industry, focusing the transformation journey on nine key elements. In FY15, a template was designed by the Department of Mineral Resources which allowed mining companies to provide the information necessary to assess their success in achieving key Mining Charter targets. The following table provides a synopsis of our performance against the targets for each of the Mining Charter's nine pillars for the calendar year ended 31 December 2014.

Pillar	Target	Compliance as at 31 December 2014
<b>Reporting</b>		
We are required to report the level of compliance with the Mining Charter by calendar year.	Annually	✓
<b>Ownership</b>		
We are required to transfer 26% of Harmony's equity to historically disadvantaged South African entities. Beneficiaries could include entrepreneurs, employees and community trusts.	26%	✓
<b>Housing and living conditions</b>		
Mining companies housing employees in hostels are required to provide single-person rooms, as well as family units.	Occupancy rate of one room per person Family units established	97.78% Hostels have been upgraded to allow for one person per room, converting some hostels into family units and establishing home ownership programmes which include the construction of houses. Harmony is working in partnership with the Department of Human Settlements to convert old hostels into family units. Masimong has been completed while Merriespruit is in progress. A key challenge was to comply fully regarding the Doornkop mining licence. For more information please refer to the Employees and Community section on page 76
<b>Procurement and enterprise development</b>		
We are required to achieve a certain level of procurement spending with black-owned entities in order to encourage the economic empowerment and development of such suppliers.	Capital goods: 40% Services: 70% Consumer goods: 50% Annual contribution by multinational suppliers to socio-economic development: 0.5% of the value of any supply contract	Capital goods: 82.56% Services: 73.89% Consumer goods: 67.56% Harmony engaged all its multinational suppliers urging them to contribute to socio-economic development, as prescribed by the Mining Charter. Harmony is also exploring the potential of a Harmony-supported fund for this very same purpose, which will allow for proper monitoring of contributions made by our suppliers. Harmony has done a great deal to empower and develop black-owned suppliers and/or to encourage ownership transformation of supplier companies. See page 98 for more details.

Pillar	Target	Compliance as at 31 December 2014
<p><b>Employment equity</b></p> <p>Workplace diversity and equitable representation by historically disadvantaged South Africans at all levels are seen as catalysts for social cohesion, transformation and competitiveness.</p>	<p><b>Top management</b> Board: 40%</p> <p><b>Senior management</b> (executive committee): 40%</p> <p><b>Middle management:</b> 40%</p> <p><b>Junior management:</b> 40%</p> <p><b>Core skills:</b> 40%</p>	<p><b>Top management</b> Board: 60%</p> <p><b>Senior management</b> (executive committee): 46.49%</p> <p><b>Middle management:</b> 38.58%</p> <p><b>Junior management:</b> 56%</p> <p><b>Core skills:</b> 62.57%</p> <p>Specific emphasis has been placed on demographic representation particularly insofar as women are concerned. Although all group-wide employment equity targets have been met, further efforts are currently underway to ensure we are fully transformed at an operational level as well.</p>
<p><b>Human resource development</b></p> <p>The development of employee skills is integral to social transformation in the workplace and to sustainable growth.</p> <p>We are required to contribute to the development of the requisite skills, including the support of South African-based research and development initiatives intended to develop solutions to exploration, mining, processing, technology efficiency, beneficiation and environmental conservation challenges.</p>	<p>Percentage of total payroll to be invested: 5%</p>	<p>Percentage of payroll invested: 5.95%</p>
<p><b>Mine community development</b></p> <p>To achieve our social licence to operate, we need to make meaningful contributions towards community development, particularly in communities close to the mines and in labour-sending areas.</p> <p>Development programmes must be based on a clear assessment of development needs, in line with local Integrated Development Plans.</p>	<p>Project implementation as at 30 June 2015</p>	<p>86.44%</p>



Simulated training at Target 1

# MINING CHARTER COMPLIANCE CONTINUED

Pillar	Target	Compliance as at 31 December 2014
<p><b>Sustainable development and growth</b></p> <p>Given that mineral resources are non-renewable, it is important to balance the economic benefits of mining with the social and environmental needs of our communities and thus we are required to meet specific obligations in respect of health, safety and environmental management.</p> <p>As one of the most-regulated industries in South Africa, the mining industry has highly developed health, safety and environmental strategies in place to improve the industry's management and performance in this regard.</p>	<p>Implementation of approved Environmental Management Programmes: 100%</p> <p>Implementation of the tripartite action plan on health and safety: 100%</p> <p>Percentage of samples in South African facilities: 100%</p>	<p>Implementation of approved Environmental Management Programmes: 87.50%</p> <p>At the time of finalisation of the Mining Charter, Harmony still needed to conduct concurrent rehabilitation at certain of its sites, hence the shortfall. Please refer to the Environmental Performance section on page 100 for more details.</p> <p>Implementation of the tripartite action plan on health and safety: 100%</p> <p>Percentage of samples in South African facilities: 100%</p>
<p><b>Beneficiation</b></p> <p>The Mining Charter encourages companies to beneficiate the minerals they mine. The incentive is that beneficiation advances may be used to offset black economic empowerment ownership requirements. We benefit from our shareholding in Rand Refinery (Pty) Limited. All our gold is fully refined and beneficiated to final product within South Africa for sale to customers.</p> <p>In addition, Harmony beneficiates at its jewellery school in Welkom. The first commercial outlets supplied by the school were opened in April 2015.</p>		
<b>Total score:</b>		<b>91.03%*</b>

\* According to the Mining Charter, an overall score of 91.03% represents an "Excellent performance rating"



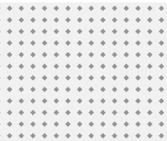
Masimong housing project

# GOVERNING HARMONY

## GOVERNING HARMONY

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# CORPORATE GOVERNANCE

## THE VALUE OF GOOD CORPORATE GOVERNANCE

Harmony's corporate governance framework and processes are aimed at fulfilling the company's obligations to all stakeholders. These obligations are the foundation both of our strategy and of our values, and are inseparable from our practice of corporate governance.

Harmony's board is tasked with making the decisions necessary to shape the strategy and to guide the company in attaining its strategic goals. We thus seek particular skills in our board members to enable them to contribute meaningfully to the company. These skills include knowledge of the South African gold mining industry as well as the local and international economy, financial and/or mining expertise, an understanding of socio-economic expectations and knowledge of the legislation and regulations in the jurisdictions in which we operate.

Harmony's values are entrenched in our code of ethics and underpin not only our approach to corporate governance but everything we do, and every decision that we make. Moreover, our board members live our values and lead by example by making decisions that are in line with our values. Leadership, strategy and our values are interdependent and our approach to corporate governance seeks to ensure this.

Each quarter, the board, through the audit and risk committee, reviews the company's risks and operational, financial and sustainability performances, and relates these back to strategy at the annual strategy session.

## OUR APPROACH TO CORPORATE GOVERNANCE

### Governance practices and reporting

The foundation of our corporate governance is compliance with the Companies Act, the requirements of the JSE Limited, where we have our primary listing, and the New York Stock Exchange as well as the King Report on Governance for South Africa and the King Code of Governance Principles (King III) and related principles of good corporate governance. Harmony also complies voluntarily with the principles of the United Nations Global Compact, International Council on Mining and Metals, the Global Reporting Initiative and the Cyanide Code.

In line with the JSE Listings Requirements, we apply all 75 principles of King III. Any deviations from the recommendations of King III are specifically mentioned in this report. A detailed King III compliance register can be found on page 182.

New York Stock Exchange foreign private issuers, such as Harmony, must briefly highlight any significant ways in which their corporate governance practices differ from those followed by United States domestic companies subject to the listing standards of the New York Stock Exchange. A brief summary of the significant differences can be found in our 2015 Form 20-F filed with the United States Securities and Exchange Commission on our website at [www.harmony.co.za/investors/reporting/20f](http://www.harmony.co.za/investors/reporting/20f).

Our governance structures and processes are reviewed regularly and adapted when necessary to reflect what is happening internally in Harmony, as well as to keep up with national and international best practice.

### Board leadership

We have paid specific attention to the composition of our board to ensure a balance of power. Harmony has a unitary board comprising executive and non-executive directors with a majority of independent non-executive directors.

On the recommendation of the nomination committee and in terms of the King III requirement, the board was evaluated and the classification confirmed of all independent non-executive directors. This includes directors serving on the board for longer than nine years.

The roles of the chairman and chief executive officer are distinct and separate, as governed by the board's terms of reference and the delegation of authority framework.

Our chairman, Patrice Motsepe, was appointed based on the value he adds to Harmony in this role, given the vital skills he has. Patrice has served on our board since 2003 and was most recently re-elected as chairman in August 2015. In terms of our succession plan, the

chairman is currently supported by a deputy chairman, Modise Motloba, who has held this position since August 2012. As determined in accordance with King III, Patrice is not considered to be independent.

As a result, Fikile De Buck was re-appointed by the board as our lead independent non-executive director in August 2015. Her role is in line with the recommendations of King III and she assists the board in managing any actual or perceived conflicts of interests that may arise from the non-independence of the chairman. Mavuso Msimang was appointed deputy lead independent non-executive director on 5 May 2014.

For more on the members of our board see page 28.

### Appointment of directors

The responsibility for board appointments lies with the nomination committee, which recommends all new board appointments and reviews succession plans for directors and management. In line with King III, the board chairman is a member of this committee. The procedures governing appointments are formal and transparent. While the nomination committee recommends individuals as members of the board, the appointment of board members is considered by the board as a whole, in accordance with its terms of reference. These appointments are, in turn, approved by shareholders.

When making new appointments to the board, Harmony considers the following factors: skills; experience, gender and demographics. We are satisfied that we currently have an acceptable balance of members and that our non-executive and independent directors have sufficient experience and knowledge among them to carry significant weight in the board’s decision-making process.

### Board induction and training

Once appointed, directors undergo the company’s board induction programme. Managed by the company secretary, this programme provides new board members with comprehensive company information and governance packs. It also offers directors the opportunity to meet with various management teams and to tour the business. No new directors were appointed during the year.

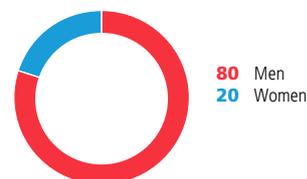
A formal training-needs analysis is conducted annually to ensure board members are appropriately trained, with ad hoc training opportunities identified during the year. Formal training on relevant topics is given at each board meeting, while the company secretary provides board members with regular updates on regulatory and industry developments. Our board also took time to visit our operations and community projects during the year.

### Board responsibilities

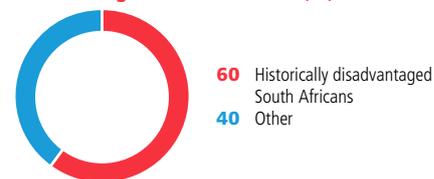
The board responsibilities are carried out with the company’s best interests in mind. Our board receives sufficient information to ensure objective decision-making, and is expected to act rationally at all times. Our code of ethics enshrines behaviour that puts the best interests of Harmony ahead of those of individuals. The code of ethics is available at [www.harmony.co.za/sustainability/governance#policies](http://www.harmony.co.za/sustainability/governance#policies).

One of the board’s primary functions is to establish management structures and processes that assist in maintaining the sustainability of our business in terms of our financial, social and environmental performance. The board and its committees have work plans in place that allow them to address their responsibilities adequately throughout the year. These work plans are reviewed and confirmed quarterly.

Composition of the board – by gender (%)



Composition of the board – by historically disadvantaged South Africans (%)



Composition of the board – by director (%)



# CORPORATE GOVERNANCE CONTINUED

Responsible citizenship is core to the company and, through the social and ethics committee, the board ensures we remain a committed, socially responsible corporate citizen. One of the ways in which the board ensures Harmony is a good corporate citizen is by considering and responding to the legitimate expectations of stakeholders. This requires a careful balance between promoting our business interests and protecting our stakeholder relations – it is essential that Harmony remains profitable in order to be able to share these profits with stakeholders. The social and ethics committee receives quarterly reports on stakeholder engagement, which it uses to monitor progress and provide feedback to the board. In addition, the board is kept informed of shareholder perceptions after roadshows and other shareholder engagements (refer to the Stakeholder Engagement section on page 52).

## **NOTEWORTHY ACTION**

### **Building relationships with stakeholders**

The board interacts with many of our key stakeholders during the course of the year. This, we believe, is important – our relationships are central to our business and our strategy. Insight into these relationships improve board members' ability to fulfil their roles appropriately.

During the year under review the board spent time with our employees during site visits to the operations, the company's bio-energy project in the Free State and the Masimong Health Hub. Board members also had an opportunity to dine with our employees at the Masimong hostel.

In addition, the chief executive officer and financial director had direct contact with investors through road shows, while the whole board interacted with shareholders at the annual general meeting. The chief executive officer engages with the greater industry through the Chamber of Mines.

To sustain our business, we need to ensure our balance sheet remains strong and flexible. The board undertakes quarterly reviews of our financial performance, while the executive management team reviews our operational results on a weekly basis. If the company were found to be in financial distress, the board would consider what mechanisms would be appropriate to address this. Ordinarily, the board uses these quarterly reviews to perform solvency and liquidity tests to support the going concern statement, in line with the provisions of the Companies Act.

In line with the International Integrated Reporting Council guidelines, the board reviews and approves this integrated report as part of its annual duties. The audit and risk committee makes a final recommendation to the board for consideration.

The board monitors the performance of the chief executive officer. The board also evaluates succession plans for the chief executive officer and executive management annually to ensure a continuation of skills and expertise for the future.

## **BOARD COMMITTEES**

In order to focus on our priorities, particular responsibilities have been delegated to board committees in terms of the board delegation of authority and the committees' terms of reference. The board does not abdicate its overall responsibility but rather the work done by these committees serves to support the board in executing its responsibility. At each board meeting, the committee chairmen report on the activities of their respective committees and make recommendations on key decisions. Some duties are further delegated to the chief executive officer and financial director who, in turn, delegate some of these responsibilities to the executive committee and management, who are closer to the operations. A clear line of communication is in place to ensure these responsibilities are well managed, underpinning our value of accountability.

Each board committee comprises board members with the skills and expertise that suit its portfolio, allowing committee members to apply their minds and make well-considered recommendations to the board. Minutes of each committee meeting are included in the board packs distributed prior to board meetings to provide context to deliberations at committee meetings. To ensure board members are able to fully consider what they need to within these committees, and on the board, each director has unrestricted access to the advice and services of senior management, allowing them insight into the business, as well as full access to company and subsidiary information, records, documents and property. Our non-executive directors are encouraged to visit our operations and attend management meetings to get a sense of how they are run. However, they remain independent, allowing management to fulfil their duties fully. If they feel it is necessary, our board members can request independent, professional advice at the company's expense.

## Audit and risk committee

### Members

- John Wetton\* (chairman)
- Fikile De Buck\*
- Modise Motloba\*
- Simo Lushaba\*
- Karabo Nondumo\*

\* *Independent non-executive*

### Description of expertise and experience

- Accounting experience, experience in investment banking, treasury services and fund management
- Roles on various other boards, as well as industry bodies
- Governance experience
- Knowledge of business development in and around Africa
- Previous roles as chief financial officers, business managers and an external auditor. Therefore a good understanding of company finances, risk, processes and controls

### Primary functions

- Monitors the operation of an adequate system of internal control and control processes
- Monitors the preparation of accurate financial reporting and statements in compliance with all applicable legal and corporate governance requirements and accounting standards
- Monitors risk management, ensures that significant risks identified are appropriately addressed and supports the board in the overall governance of risk

### Key activities and actions in FY15

For the actions of the audit and risk committee in FY15 refer to the committee's report on page 202.

## Investment committee

### Members

- Simo Lushaba\* (chairman)
- Ken Dicks\*
- Cathie Markus\*
- Vishnu Pillay\*
- John Wetton\*
- André Wilkens

\* *Independent non-executive*

### Description of expertise and experience

- Occupy various roles on other boards
- Experience in entrepreneurship and business development
- Extensive knowledge of the mining, legal and financial industries
- This combination of skills equips the investment committee with knowledge of what reasonable returns on investments are and a thorough understanding of the investment process, as well as insight into what investors want

### Primary functions

- Considers projects, acquisitions and disposals in line with Harmony's strategy and ensures that due diligence procedures are followed
- Conducts other investment-related functions designated by the board

### Key activities and actions in FY15

- Reviewed and recommended the budget and business plans for FY16
- Considered whether the company could afford a proposed dividend distribution, taking into account the company's cash flow, current and future projects
- Considered investments, proposals, projects and proposed acquisitions in line with the board's approved delegation of authority and the committee's terms of reference

# CORPORATE GOVERNANCE CONTINUED

## Nomination committee

### Members

- Fikile De Buck\* (chairman)
- Joaquim Chissano\*
- Patrice Motsepe
- Modise Motloba\*
- Mavuso Msimang\*

\* *Independent non-executive*

### Description of expertise and experience

- Experience in the mining, financial, accounting and legal sectors
- Extensive experience in management and leadership roles
- Understanding of Harmony, and its needs, as well as of the requirements of being on a board. These insights allows the committee to find and nominate individuals who will add value to our Harmony board in the areas that we require

### Primary functions

- Ensures that procedures governing board appointments are formal and transparent
- Makes recommendations to the board on all new board appointments
- Reviews succession planning for directors and other members of the executive team and oversees the board's self-assessment process

### Key activities and actions in FY15

- Reviewed succession planning for directors and other members of the executive team and oversaw the board's self-assessment process
- Reviewed and recommended directors for re-election who retired by rotation in terms of the company's memorandum of incorporation
- Reviewed and recommended the composition, structure and size of the board and board committees
- Considered the positions of the chairman of the board, the deputy chairman of the board, the lead independent director and the deputy lead independent director and made recommendations to the board
- Reviewed and recommended the independence of non-executive directors (especially independent non-executives serving on the board for longer than nine years)
- Reviewed and recommended succession plans for the board, the chairman of the board, the chief executive officer, executive management, the company secretary and the head of internal audit
- Followed a transparent and formal process in recommending a suitable candidate for the board's consideration and appointment to replace Graham Briggs as chief executive officer following his retirement

## Remuneration committee

### Members

- Cathie Markus\* (chairman)
- Fikile De Buck\*
- Simo Lushaba\*
- Karabo Nondumo\*^
- Vishnu Pillay\*#
- John Wetton\*
- André Wilkens

\* *Independent non-executive*

^ *Resigned from the committee on 7 May 2015*

# *Appointed to the committee on 7 May 2015*

### Description of expertise and experience

- Experience in accounting, remuneration and financial management roles, as well as legal and mining experience, allowing members to ensure our remuneration is aligned with industry standards, best practice and legislation
- Knowledge of the duties and responsibilities of board and executive positions, allowing realistic key performance indicators to be related to remuneration

## Remuneration committee *continued*

### Primary functions

- Ensures directors and executive managers are fairly rewarded for their contribution to Harmony's performance
- Assists the board in monitoring, reviewing and approving Harmony's compensation policies and practices, and in administering its share incentive schemes
- Operates as an independent overseer of the group remuneration policy and makes recommendations to the board for final approval

### Key activities and actions in FY15

- Reviewed and recommended the remuneration policy to the board for inclusion in the notice to the annual general meeting for consideration by the shareholders as a non-binding advisory resolution ([www.har.co.za/15/download/HAR-RS.pdf](http://www.har.co.za/15/download/HAR-RS.pdf))
- Reviewed and recommended the remuneration report to be included in the integrated annual report (page 190)
- Reviewed and recommended the non-executive directors' fees to the board for consideration and approval by shareholders. For more information, refer to the Report to Shareholders 2015, which is available at [www.har.co.za/15/download/HAR-RS15.pdf](http://www.har.co.za/15/download/HAR-RS15.pdf)
- Reviewed and recommended executive directors' and executive management's annual salary increases (page 190). No increases were awarded to any of the non-executive directors, executive directors or executive management in FY15.
- Reviewed the annual salary increases of the company secretary and the head of internal audit. No management salary increases were awarded in FY15.
- Reviewed a comprehensive benchmark on incentive schemes in the industry and made the necessary recommendations to the board. Please refer to the remuneration report for more information (page 190).

The details of these activities are contained in this committee's report, which can be found on page 190.

## Social and ethics committee

### Members

- Modise Motloba\* (chairman)
- Joaquim Chissano\*
- Fikile De Buck\*
- Cathie Markus\*
- Mavuso Msimang\*
- John Wetton\*

\* *Independent non-executive*

### Description of expertise and experience

- Proven experience in the fields of sustainable and business development in Africa, community affairs, government relations, the drafting and implementing of charters, international relations and global leadership
- This collected experience of committee members brings with it the skills and relationships necessary to ensure Harmony can contribute to meaningful change through its social development and transformation work. In addition, this experience adds weight to the committee's ability to enforce the code of ethics within Harmony

### Primary functions

- Oversees policy and strategies pertaining to occupational health and employee well-being, environmental management, corporate social responsibility, human resources and ethics management
- Monitors implementation of policies and strategies by executives and their management teams for each discipline referred to above
- Assesses compliance of the company against relevant regulations
- Reviews material issues in each of the above disciplines to evaluate their relevance in the reporting period, and to identify additional material issues that warrant reporting, including sustainability related key performance indicators and levels of assurance

### Key activities and actions in FY15

- Reviewed and recommended the social and ethics committee report to be included in the integrated annual report
- Reviewed and considered the social, economic and environmental issues affecting the company's business
- Reviewed and considered the effect that the company's operations had on the economic, social and environmental well-being of communities, as well as significant risks within the ambit of the committee's responsibilities
- Approved material elements of sustainability reporting and the key performance indicators which were externally assured
- Considered and monitored the company's employment relationships
- Attended a site visit to the company's bio-energy project in the Free State, had lunch at the Masimong 5 hostel and visited the Masimong health hub

This committee's report can be found on page 22.

# CORPORATE GOVERNANCE CONTINUED

## Technical committee

### Members

- André Wilkens (chairman)
- Ken Dicks\*
- Cathie Markus\*^

- Vishnu Pillay\*

- Karabo Nondumo\*

\* independent non-executive

^ resigned from the committee on 7 May 2015

### Description of expertise and experience

- Decades of experience in the mining industry, particularly in gold, mining technology and mining engineering
- Strong research skills
- This experience allows members to grasp fully the technical and operational challenges facing Harmony and lend their knowledge to the tasks required of them

### Primary functions

- Provides a platform to discuss strategy, performance against targets, operational results, projects and safety
- Informs the board of key developments, progress against objectives and the challenges facing operations
- Reviews strategic plans before recommending such to the board for approval
- Provides technical guidance and support to management

### Key activities and actions in FY15

- Monitored exploration in South Africa and Papua New Guinea
- Monitored all South African and Papua New Guinean operations
- Reviewed and recommended to the board the annual budget and business plans of the company
- Monitored safety across all operations
- Attended an underground site visit to Phakisa. Also visited the Phakisa health hub and ice plants.

During the review period, the majority of members of all board committees were independent non-executive directors. All board committees were chaired by an independent non-executive director, except for the technical committee chaired by André Wilkens (a non-independent, non-executive director). The board is confident that André's leadership as chairman of the technical committee is in the best interest of the company, based on his extensive knowledge of the specific areas of responsibilities of that committee.

## BOARD AND BOARD COMMITTEE MEETING ATTENDANCE

	Board	Audit and risk	Nomination	Remuneration	Technical	Investment	Social and ethics
<b>Number of meetings</b>	5	5	3	5	8	4	5
Patrice Motsepe (chairman)	5	–	3	–	–	–	–
Modise Motloba (deputy chairman)	5	3	2	–	–	–	5
Joaquim Chissano	4	–	2	–	–	–	2
Fikile De Buck	4	3	3	4	–	–	4
Ken Dicks	5	–	–	–	8	4	–
Simo Lushaba	4	4	–	4	–	4	–
Cathie Markus	5	–	–	5	4***	4	4
Mavuso Msimang	4	–	3	–	–	–	2
Karabo Nondumo	5	4	–	4*	8	–	–
Vishnu Pillay	5	–	–	0**	8	4	–
John Wetton	5	5	–	5	–	4	5
André Wilkens	5	–	–	5	8	4	–
Graham Briggs	5	–	–	–	–	–	–
Frank Abbott	4	–	–	–	–	–	–
Mashego Mashego	4	–	–	–	–	–	–

– Not applicable

\* Resigned from the committee on 7 May 2015

\*\* Appointed to the committee on 7 May 2015

\*\*\* Resigned from the committee on 7 May 2015

## COMPANY SECRETARY

In terms of section 3.84(i) and (j) of the JSE Listings Requirements, the board has, on the recommendation of the nomination committee, considered the performance, qualifications, level of experience and competence of the company secretary. The board is satisfied that Riana Bisschoff is sufficiently competent, qualified and experienced to act as Harmony's company secretary. The board is further satisfied that Riana is not a director of the board or any of the company's subsidiaries and that she maintained an arm's-length relationship with the board during FY15.

The following information was taken into consideration during the review:

Riana Bisschoff (LLB, LLM) is a qualified attorney, conveyancer and notary. She has been a company secretary for the past 11 years (eight years in a listed environment). Riana was appointed group company secretary in March 2012, and is fully supported by the board and management. She plays an active role in achieving good corporate governance, supporting the chairman and the board in:

- Ensuring the effective functioning of the board
- Providing guidance to the chairman, board and directors of Harmony's subsidiaries on their responsibilities and duties in the prevailing regulatory and statutory environment
- Raising matters that may warrant the attention of the board

The company secretary assists in ensuring that the board's decisions and instructions are clearly communicated and is available as a central source of guidance and advice in Harmony on matters of ethics.

## BOARD EVALUATION

The board conducts annual self-assessments of its own performance, as well as the performances of its board committees, individual directors and the chairman. The audit firm, KPMG, assists with this, adding independence to the process. From this process, a full report on the findings and recommendations is drawn up, and the board implements any changes necessary during the following financial year. The administrative recommendations made during the FY15 assessment process will be addressed during FY16.

## LEGISLATIVE COMPLIANCE

### Relevant Global Reporting Initiative indicators: G4-S07, G4-S08

One of the duties of the board is to ensure that Harmony complies with all applicable laws, in both South Africa and Papua New Guinea, and that it adheres to non-binding rules, codes and standards.

We are in the process of finalising a revised compliance strategy which will serve as a framework for an overriding, renewed monitoring system.

Harmony paid no significant fines in any of its areas of operation and had no actions brought against it for anti-competitive behaviour, or for anti-trust or monopoly practices during FY15. See page 22 for the social and ethics committee report and page 202 for the audit and risk committee report.

Given the importance of public policy and our strategic objective of maintaining our licence to operate, we have increased our engagement in recent years with the South African government on policy, often through the Chamber of Mines. One such example is the engagement we had, through the Chamber of Mines, on carbon taxes and the Mining Charter, especially as it relates to ownership and section 54 applications in the mine health and safety arena.

We have also engaged with Eskom and the energy regulator on issues that could have an impact on our operations, such as security of the power supply, the cost of electricity and potential carbon taxes.

# CORPORATE GOVERNANCE CONTINUED

## ROTATION OF DIRECTORS

Aligning with King III and with Harmony's memorandum of incorporation, one-third of the board's non-executive directors must retire from office at each annual general meeting. These will be the non-executive directors who have been in office the longest since their last election. In addition, those directors appointed following the last annual general meeting held are also expected to stand down for election by shareholders following their respective appointments.

In line with this, the directors who will retire at this year's annual general meeting are:

- Fikile De Buck
- Joaquim Chissano
- Modise Motloba
- Patrice Motsepe

Their curricula vitae are available on pages 28 to 32.

## CODE OF ETHICS

### Relevant Global Reporting Initiative indicators: G4-S05

Developed to respond to the challenge of ethical conduct in the business environment, our code of ethics commit Harmony, our employees and our contractors to the highest moral standards, free from conflicts of interest. Over the past few years we have done extensive work in enshrining our five values – safety, accountability, achievement, connectedness and honesty – into everyday behaviour at Harmony, through constructive employee engagement. These values underpin our code of ethics and align it with our strategy.

Every second year the board reviews the code of ethics, while its application within Harmony is continually monitored by management. Our ethics programme is also subject to independent assurance as part of the internal audit coverage plan.

Our management ethics committee monitors our ethical culture and integrity. It also assesses declarations of interest in terms of the code of conduct and provides feedback to the executive committee, which then reports to the board's social and ethics committee. As a result, ethics are discussed and examined at every level of management within the company.

The social and ethics committee of the board is in the process of reviewing a draft code of conduct which will replace our current code of ethics. We continue to improve our efforts to adhere to good corporate governance and ethical standards. Making our codes easier to read and understand is part of this process.

The code of ethics encourages employees and other stakeholders to report any suspected irregularities. This can be done anonymously through a 24-hour crime line (which is managed by external auditing specialists), as well as other channels. All incidents reported are investigated and monitored by the white-collar crime committee, which comprises managers representing various disciplines in the company and reports to the management ethics committee.

The identity of any employee or stakeholder who reports non-compliance with the code of ethics is protected. Our anonymous ethics hotline number is +27 (0) 800 21 23 39 and is widely advertised throughout the organisation.

## RESTRICTIONS ON SHARE DEALINGS

During price-sensitive periods, our employees and directors are prohibited from dealing in Harmony shares. Written notice of these restricted periods is communicated to employees and directors by the company secretary. In terms of regulatory and governance standards, directors and employees are required to disclose any dealings in Harmony shares in accordance with the JSE Listings Requirements. The clearance procedure for directors and executive management to deal in Harmony shares is regulated by the company's policy on trading in shares and insider trading.

## INFORMATION TECHNOLOGY GOVERNANCE

The board recognises that information technology is integral to doing business today, and fundamental in supporting the sustainability and growth of our company. Accordingly, the focus of our information technology division is to ensure accurate, reliable and timely information that supports effective reporting and appropriate management of our business to enable Harmony to achieve its sustainability objectives.

The audit and risk committee monitors the return on investment from significant information technology projects. Information technology management ensures that the key elements of appropriate project management principles are applied to all information technology projects. A management information technology steering committee has oversight of various information technology aspects, including governance, compliance and business continuity.

Formal processes are in place to protect and manage information, including sensitive information processed by the company.

## POLITICAL DONATIONS

### Relevant Global Reporting Initiative indicators: G4-S06

Harmony has a political donations policy. We made no political donations for the year under review.

## SARBANES-OXLEY

In line with New York Stock Exchange listing requirements, we comply with the Sarbanes-Oxley Act. Details of this compliance and relevant processes can be found in our Form 20-F for FY15, which is available at [www.harmony.co.za/investors/reporting/20f](http://www.harmony.co.za/investors/reporting/20f) from 23 October 2015.

## ACCESS TO INFORMATION

Harmony complies with the Promotion of Access to Information Act 2000, which protects the constitutional right to information that is required to exercise or protect a right. The purpose of this legislation is to foster a culture of transparency and accountability in both public and private bodies, and to promote a society in which all South Africans are enabled to enjoy their rights. For more on this see our website: [www.harmony.co.za/sustainability/governance#policies](http://www.harmony.co.za/sustainability/governance#policies). The company received no requests for access to information during FY15.

## HUMAN RIGHTS

### Relevant Global Reporting Initiative indicators: G4-HR1, G4-LA14, G4-HR3, G4-HR9, G4-HR10, G4-HR12, G4-S03, G4-S03

Harmony recognises that human rights should be integrated into all that we do and, through the entrenchment of our values, we endeavour to do this every day.

In line with the Companies Act, the social and ethics committee's responsibilities include monitoring of the company's standing in terms of the goals and purposes of the ten principles set out in the United Nations Global Compact. The United Nations Global Compact asks companies to embrace, support and enact, within their sphere of influence, a set of core principles in the areas of human rights, labour standards, the environment and anti-corruption. The social and ethics committee monitors our performance regarding these principles, based on the various reports submitted to them in terms of the committee's annual work plan.

We acknowledge that human rights cannot be limited to how we conduct our business, but must also be considered when we consider our business partnerships with other companies involved in our supply chain. We screen prospective suppliers on their level of legal compliance and compare their business practices with those prescribed in our code of ethics. This ensures that they behave in a way that Harmony believes is appropriate and that is aligned with our values.

During the year under review, we did not identify any human rights infringements on the part of companies involved in our supply chain, nor did we terminate any relationships on this basis. Furthermore, no human rights grievances were recorded against Harmony.

# KING III COMPLIANCE SCORECARD

## KING III COMPLIANCE REPORT: FY15

In South Africa, in terms of the JSE Limited Listings Requirements as well as the King Report on Governance for South Africa and the King Code of Governance Principles (King III), companies are required to disclose compliance with the latter in the current reporting year. The table below details Harmony's compliance status as at 23 October 2015. We provide supplementary information in support of the application of each of these governance standards within our company.

Principle	Applied	Explanation/comment
<b>Principle 1.1</b>		
The board should provide effective leadership based on an ethical foundation.	✓	The board of directors has established management structures and processes based on ethical values and good corporate governance principles, ensuring Harmony's business is sustainable in terms of our financial, social and environmental performance.  The board is governed by its terms of reference available at <a href="http://www.harmony.co.za/sustainability/governance">www.harmony.co.za/sustainability/governance</a> .
<b>Principle 1.2</b>		
The board should ensure the company is and is seen to be a responsible corporate citizen.	✓	Responsible citizenship is a core principle underpinning Harmony's values and a key component of the board's terms of reference. Through its social and ethics committee, the board ensures the company remains a committed, socially responsible corporate citizen. For more information refer to the social and ethics committee report on page 22 of the Integrated Annual Report 2015 and for the social and ethics committee terms of reference please refer to <a href="https://www.harmony.co.za/sustainability/governance#policies">https://www.harmony.co.za/sustainability/governance#policies</a> on our website.
<b>Principle 1.3</b>		
The board should ensure the company's ethics are managed effectively.	✓	Harmony's code of ethics (the code) ( <a href="http://www.harmony.co.za/sustainability/governance">http://www.harmony.co.za/sustainability/governance</a> ) were adopted and updated to respond to the challenge of ethical conduct in the business environment. For more information on the code of ethics, refer to page 180 of the Integrated Annual Report 2015.
<b>Principle 2.1</b>		
The board should act as the focal point for and custodian of corporate governance.	✓	The board advocates effective, responsible leadership and aims to lead by example. Governance structures and processes are regularly reviewed and adapted to accommodate internal developments and reflect national and international best practice while considering the best interests of the company.
<b>Principle 2.2</b>		
The board should appreciate that strategy, risk, performance and sustainability are inseparable.	✓	As reflected in its terms of reference, and as is evident from the content of the integrated annual report, the board appreciates that strategy, risk, performance and sustainability are inseparable. The board annually considers and reviews the company's strategy relative to its risks, performance and sustainability at a strategy session arranged specifically for this purpose.
<b>Principle 2.3</b>		
The board should provide effective leadership based on an ethical foundation.	✓	Refer to principle 1.1.
<b>Principle 2.4</b>		
The board should ensure the company is and is seen to be a responsible corporate citizen.	✓	Refer to principle 1.2.

Principle	Applied	Explanation/comment
<b>Principle 2.5</b>		
The board should ensure the company's ethics are managed effectively.	✓	Refer to principle 1.3.
<b>Principle 2.6</b>		
The board should ensure the company has an effective and independent audit committee.	✓	The board has approved the mandate for the audit committee, which includes monitoring risk management. At Harmony, the committee is, therefore, known as the audit and risk committee. In FY15, the committee again complied with the legal, regulatory and other responsibilities assigned to it by the board in terms of its terms of reference. These are detailed in this committee's report – on page 202 of the Integrated Annual Report 2015 – which confirms the audit and risk committee's effectiveness and independence.
<b>Principle 2.7</b>		
The board should be responsible for the governance of risk.	✓	Refer to principle 2.6. The board is assisted in this by the audit and risk committee, ensuring that any significant risks facing Harmony are adequately addressed. For more information, refer to the risk management report on page 202 of Integrated Annual Report 2015.
<b>Principle 2.8</b>		
The board should be responsible for information technology governance.	✓	The audit and risk committee oversees and monitors information technology governance on behalf of the board, and views this as an important aspect of risk management. Refer to the audit and risk committee report on page 202 of Integrated Annual Report 2015.
<b>Principle 2.9</b>		
The board should ensure the company complies with applicable laws and considers adherence to non-binding rules, codes and standards.	✓	Refer to a discussion of our legislative compliance on page 179 of the Integrated Annual Report 2015.
<b>Principle 2.10</b>		
The board should ensure there is an effective risk-based internal audit.	✓	<p>The internal audit function assists the board and management by independently reviewing the adequacy and effectiveness of Harmony's systems of internal control. Significant findings are reported to the audit and risk committee and follow-up audits are conducted in areas where significant internal control weaknesses are found. Harmony has an in-house internal audit function and co-sourced arrangements with audit firms to provide assurance on the effectiveness of governance, risk management and the internal control environment.</p> <p>The purpose, authority and responsibility of the internal audit function are formally documented in the internal audit charter as approved by the audit and risk committee.</p>
<b>Principle 2.11</b>		
The board should appreciate that stakeholders' perceptions affect the company's reputation.	✓	The board considers and responds to the legitimate interests and expectations of Harmony's stakeholders. The social and ethics committee receives quarterly reports on stakeholder engagement, and reports thereon at board meetings. Board members are also regularly apprised of stakeholder perceptions after management road shows and other shareholder engagements. For more information on the company's stakeholder engagements, refer to page 52 of the Integrated Annual Report 2015.
<b>Principle 2.12</b>		
The board should ensure the integrity of the company's integrated report.	✓	The integrated report is reviewed by the audit and risk committee with the assistance of the social and ethics committee (on sustainability matters). The report is recommended to the board for approval.

# KING III COMPLIANCE SCORECARD CONTINUED

Principle	Applied	Explanation/comment
<b>Principle 2.13</b>		
The board should report on the effectiveness of the company's system of internal controls.	✓	Refer to principle 2.10.
<b>Principle 2.14</b>		
The board and its directors should act in the best interests of the company.	✓	The board debates issues rationally and with sufficient information from management to reach an objective assessment. All directors are mindful of their duty to act in the best interests of the company. The board has approved a policy for dealing in Harmony shares which applies to directors, prescribed officers and selected employees.
<b>Principle 2.15</b>		
The board should consider business-rescue proceedings or other turnaround mechanisms as soon as the company is financially distressed as defined in the Companies Act.	✓	Twice a year, the board assesses Harmony's ability to continue as a going concern and monitors its financial performance quarterly to assess whether the company is financially distressed for the purposes of considering business-rescue proceedings and to ensure sound financial management. In addition, the board receives a quarterly update on the operations and the financial position of the company through the technical, investment and audit and risk committees as well as at the board meeting.
<b>Principle 2.16</b>		
The board should elect a chairman who is an independent non-executive director. The chief executive officer of the company should not also fulfil the role of chairman of the board.	✓	For a discussion of our board leadership, refer to page 172 of the Integrated Annual Report 2015. Our chairman is not considered to be independent and therefore, we appointed a Lead Independent Director.  The chief executive officer of the company is not the chairman of the board.
<i>Johannesburg Stock Exchange Listings Requirement, section 3.84(c).</i>		
<b>Principle 2.17</b>		
The board should appoint the chief executive officer and establish a framework for the delegation of authority.	✓	The board appointed Graham Briggs as the company's chief executive officer with effect from 1 January 2008. During 2012, his term of employment as chief executive officer was extended to 31 October 2016. Graham however decided to retire earlier and will remain the company's chief executive officer until a new chief executive officer is appointed. The existing delegation of authority is revised and refreshed when necessary and at least every second year to keep it updated with any changes that may affect the authority framework.
<b>Principle 2.18</b>		
The board should comprise a balance of power, with a majority of non-executive directors. The majority of non-executive directors should be independent.	✓	For a discussion of our board leadership, refer to page 172 of the Integrated Annual Report 2015.
<i>Johannesburg Stock Exchange Listings Requirement, section 3.84(b).</i>		
<b>Principle 2.19</b>		
Directors should be appointed through a formal process.	✓	For a discussion on the appointment of directors, refer to page 173 of the Integrated Annual Report 2015.
<i>Johannesburg Stock Exchange Listings Requirement, section 3.84(a).</i>		

Principle	Applied	Explanation/comment
<b>Principle 2.20</b>		
The induction and on-going training and development of directors should be conducted through formal processes.	✓	For a discussion on board induction and training, refer to page 173 of the Integrated Annual Report 2015.
<b>Principle 2.21</b>		
The board should be assisted by a competent, suitably qualified and experienced company secretary	✓	For a discussion on the company secretary, refer to page 179 of the Integrated Annual Report 2015.
<i>Johannesburg Stock Exchange Listings Requirement, section 3.84(i)&amp;(j).</i>		
<b>Principle 2.22</b>		
The evaluation of the board, its committees and individual directors should be performed every year.	✓	For a discussion on the evaluation of the board, refer to page 179 of the Integrated Annual Report 2015.
<b>Principle 2.23</b>		
The board should delegate certain functions to well-structured committees without abdicating its own responsibilities.	✓	For a discussion of the board committees, refer to page 174 of the Integrated Annual Report 2015.
<i>Johannesburg Stock Exchange Listings Requirement, section 3.84(d).</i>		
<b>Principle 2.24</b>		
A governance framework should be agreed between the group and its subsidiary boards.	✓	The board reviewed its delegation of authority and approved a revised delegation of authority framework on 25 August 2014.
<b>Principle 2.25</b>		
Companies should remunerate their directors and executives fairly and responsibly.	✓	For more information on Harmony's remuneration policy, refer to the remuneration report on page 190 of the Integrated Annual Report 2015.
<b>Principle 2.26</b>		
Companies should disclose the remuneration of each director and certain senior executives.	✓	Refer to the remuneration report on page 190 of the Integrated Annual Report 2015.
<b>Principle 2.27</b>		
Shareholders should approve the company's remuneration policy.	✓	The company's remuneration policy is presented to shareholders for a non-binding advisory vote at each annual general meeting. Refer to the FY15 notice of the annual general meeting contained in the Report to Shareholders 2015 ( <a href="http://www.har.co.za/15/download/HAR-RS15.pdf">www.har.co.za/15/download/HAR-RS15.pdf</a> ).
<b>Principle 3.1</b>		
The board should ensure the company has an effective and independent audit committee.	✓	Refer to principle 2.6.
<b>Principle 3.2</b>		
Audit committee members should be suitably skilled and experienced independent non-executive directors.	✓	All five members of the audit and risk committee are independent non-executive directors. The board is satisfied that members of this committee collectively have the appropriate knowledge and experience to fulfil their mandate. For more information on the audit and risk committee, refer to page 202 of the Integrated Annual Report 2015.

# KING III COMPLIANCE SCORECARD CONTINUED

Principle	Applied	Explanation/comment
<b>Principle 3.3</b>		
The audit committee should be chaired by an independent non-executive director.	✓	The chairman of this committee is an independent non-executive director.
<b>Principle 3.4</b>		
The audit committee should oversee integrated reporting.	✓	Refer to the audit and risk committee report on page 202 of the Integrated Annual Report 2015. Also refer to principle 2.12 and principle 9.2.
<b>Principle 3.5</b>		
The audit committee should ensure that a combined assurance model is applied to provide a coordinated approach to all assurance activities.	✓	Refer to the audit and risk committee report on page 202 of the Integrated Annual Report 2015.
<b>Principle 3.6</b>		
The audit committee should satisfy itself of the expertise, resources and experience of the company's finance function.	✓	Refer to the audit and risk committee report on page 202 of the Integrated Annual Report 2015.
<i>Johannesburg Stock Exchange Listings Requirement, section 3.84(g)&amp;(h).</i>		
<b>Principle 3.7</b>		
The audit committee should be responsible for overseeing the internal audit function.	✓	Refer to principle 2.10.
<b>Principle 3.8</b>		
The audit committee should be an integral component of the risk management process.	✓	Management is responsible for implementing effective risk management processes. This is overseen by the audit and risk committee on behalf of the board. A comprehensive report on risk management appears on page 41 of the Integrated Annual Report 2015.
<b>Principle 3.9</b>		
The audit committee is responsible for recommending the appointment of the external auditor and overseeing the external audit process.	✓	Refer to the audit and risk committee report on page 202 of the Integrated Annual Report 2015.
<b>Principle 3.10</b>		
The audit committee should report to the board and shareholders on how it has discharged its duties.	✓	The audit and risk committee reports to the board each quarter on how it has discharged its statutory duties, as well as those assigned to it by the board. This information is also disclosed for the period under review in the Integrated Annual Report 2015 (page 202).
<b>Principle 4.1</b>		
The board should be responsible for the governance of risk.	✓	Refer to principle 2.7.
<b>Principle 4.2</b>		
The board should determine the levels of risk tolerance.	✓	Refer to the audit and risk committee report on page 202 of the Integrated Annual Report 2015.
<b>Principle 4.3</b>		
The risk committee or audit committee should assist the board in carrying out its risk responsibilities.	✓	Refer to principle 2.7.

Principle	Applied	Explanation/comment
<b>Principle 4.4</b>		
The board should delegate to management the responsibility to design, implement and monitor the risk management plan.	✓	The risk management policy and plan is implemented by management through coordinated risk management processes. Oversight of these processes lies with the audit and risk committee.
<b>Principle 4.5</b>		
The board should ensure risk assessments are performed on a continual basis.	✓	Risk identification, assessment, response and monitoring are performed on a weekly basis at operational level while the executive committee reviews the corporate/strategic risk profile each quarter. Management provides formal quarterly risk reports to the audit and risk committee.
<b>Principle 4.6</b>		
The board should ensure frameworks and methodologies are implemented to increase the probability of anticipating unpredictable risks.	✓	Refer to principle 4.5.
<b>Principle 4.7</b>		
The board should ensure that management considers and implements appropriate risk responses.	✓	Refer to principle 4.5.
<b>Principle 4.8</b>		
The board should ensure continual risk monitoring by management.	✓	Refer to principle 4.5.
<b>Principle 4.9</b>		
The board should receive assurance regarding the effectiveness of the risk management process.	✓	Management provides formal risk reports to the audit and risk committee each quarter. In addition, evaluation of the risk management process forms part of the internal audit coverage plan.
<b>Principle 5.1</b>		
The board should be responsible for information technology (IT) governance.	✓	Refer to principle 2.8.
<b>Principle 5.2</b>		
Information technology should be aligned with the performance and sustainability objectives of the company.	✓	The board recognises that information technology is integral to doing business today, and fundamental in supporting the sustainability and growth of our company. Accordingly, the focus of our information technology division is ensuring accurate, reliable and timely information that supports effective reporting and appropriate management of our business to enable Harmony to achieve its sustainability objectives.
<b>Principle 5.3</b>		
The board should delegate to management the responsibility for implementation of an information technology governance framework.	✓	Management is responsible for implementing the information technology governance framework.
<b>Principle 5.4</b>		
The board should monitor and evaluate significant information technology investments and expenditure.	✓	The audit and risk committee monitors the return on investment from significant information technology projects. Information technology management ensures that key elements of appropriate project management principles are applied to all information technology projects.
<b>Principle 5.5</b>		
Information technology should form an integral part of the company's risk management.	✓	A management information technology steering committee has oversight of various aspects of information technology, including governance, compliance and business continuity.

# KING III COMPLIANCE SCORECARD CONTINUED

Principle	Applied	Explanation/comment
<b>Principle 5.6</b>		
The board should ensure information assets are managed effectively.	✓	Formal processes are in place to protect and manage information, including sensitive information processed by the company.
<b>Principle 5.7</b>		
A risk committee and audit committee should assist the board in carrying out its information technology responsibilities.	✓	Refer to principle 2.8.
<b>Principle 6.1</b>		
The board should ensure the company complies with applicable laws and considers adherence to non-binding rules, codes and standards.	✓	Refer to principle 2.9.
<b>Principle 6.2</b>		
The board and each director should have a working understanding of the effect of applicable laws, rules, codes and standards on the company and its business.	✓	Refer to principle 2.20.
<b>Principle 6.3</b>		
Compliance risk should form an integral part of the company's risk management process.	✓	Refer to principle 2.7.
<b>Principle 6.4</b>		
The board should delegate to management the implementation of an effective compliance framework and processes.	✓	Refer to principle 2.9.
<b>Principle 7.1</b>		
The board should ensure there is an effective risk-based internal audit.	✓	Refer to principle 2.10.
<b>Principle 7.2</b>		
Internal audit should have a risk-based approach to its plan.	✓	A fully risk-based audit coverage plan has been developed and approved by the audit and risk committee. This is in line with activities surrounding the roll out of the enterprise risk management strategy, coupled with the combined assurance strategy.
<b>Principle 7.3</b>		
Internal audit should provide a written assessment of the effectiveness of the company's system of internal control and risk management.	✓	Internal audit provides an annual written assessment to the audit and risk committee. This assessment is in accordance with the annual coverage plan.
<b>Principle 7.4</b>		
The audit committee should be responsible for overseeing internal audit.	✓	Refer to principle 2.10.
<b>Principle 7.5</b>		
Internal audit should be strategically positioned to achieve its objectives.	✓	Refer to principle 2.10.

Principle	Applied	Explanation/comment
<b>Principle 8.1</b>		
The board should appreciate that stakeholders' perceptions affect a company's reputation.	✓	Refer to principle 2.11.
<b>Principle 8.2</b>		
The board should delegate to management to proactively deal with stakeholder relationships.	✓	For an overview of our stakeholder engagement, refer to page 52 of the Integrated Annual Report 2015.
<b>Principle 8.3</b>		
The board should strive to achieve the appropriate balance between its various stakeholder groupings, in the best interests of the company.	✓	A formal stakeholder engagement policy was approved by the social and ethics committee on behalf of the board in August 2013 and is reviewed every second year. For an overview of our stakeholder engagement, refer to page 52 of the Integrated Annual Report 2015.
<b>Principle 8.4</b>		
Companies should ensure the equitable treatment of shareholders.	✓	All shareholders, including minority shareholders, are treated equally. The company abides by the requirements of the JSE Limited and New York Stock Exchange, ensuring that full, equal and timeous public disclosure is made to all shareholders and the general public on any price-sensitive activities on the part of Harmony.
<b>Principle 8.5</b>		
Transparent and effective communication with stakeholders is essential for building and maintaining their trust and confidence.	✓	In terms of our stakeholder engagement policy and in line with our corporate values of honesty and connectedness, the board provides information to stakeholders that are complete, timely, relevant, accurate and easily accessible.
<b>Principle 8.6</b>		
The board should ensure disputes are resolved as efficiently and expeditiously as possible.	✓	The audit and risk committee monitors all material legal disputes and reports to the board quarterly. Proper dispute resolution practices are in place.
<b>Principle 9.1</b>		
The board should ensure the integrity of the company's integrated report.	✓	Refer to principle 2.12.
<b>Principle 9.2</b>		
Sustainability reporting and disclosure should be integrated with the company's financial reporting.	✓	Refer to principle 2.12 and principle 3.4.
<b>Principle 9.3</b>		
Sustainability reporting and disclosure should be independently assured.	✓	Each year, selected key performance indicators – those most material to stakeholders' understanding of our performance – are independently assured. In recent years, we have steadily aimed at increasing the number of indicators assured, as well as the depth of this assurance. The social and ethics committee, under its terms of reference, approves the material elements of sustainability reporting over which the external assurance provider should provide assurance and ensures that a formal process of assurance on sustainability reporting is established through the audit and risk committee.

# REMUNERATION REPORT



**Cathie Markus**  
Chairman, remuneration committee

**“WE RELY ON CAREFULLY  
DESIGNED VARIABLE  
PAY STRUCTURES  
WHICH REQUIRE  
CERTAIN LEVELS  
OF PERFORMANCE  
AGAINST ACTIVITIES  
THAT ARE OF PRIMARY  
IMPORTANCE TO THE  
SUSTAINABILITY AND  
SUCCESS OF OUR  
BUSINESS”**

## REMUNERATION COMMITTEE

### CHAIRMAN'S LETTER

I have pleasure in submitting the annual remuneration report for FY15 on behalf of the remuneration committee and the board.

During the year we engaged with many of our shareholders who had given feedback regarding our reporting process on remuneration or aspects of our remuneration policies and procedures. We have reviewed and enhanced our remuneration reporting using the valuable inputs contained in those comments and in line with best practice, with the aim of improving our communication. Our focus has been on actions taken during the year to incorporate shareholder feedback and to provide a clear illustration of how our remuneration policies and practices are closely tied to our company strategy – ultimately reinforcing our belief in ‘pay for performance’.

During the year we also undertook an extensive review of our short- and long-term incentive schemes. Again, the comments and concerns raised by shareholders have been taken into consideration as part of this review process, and the review has resulted in us making some changes to our long-term incentive schemes. These changes are highlighted throughout the relevant sections in the report. They include the removal of gold production as a performance measure for the long-term incentives, and a change to the way we test performance measures for performance shares. Additional changes requiring shareholder approval are discussed below and are also included in the notice of our annual general meeting for our shareholders’ consideration.

This year, in line with leading international best practice and with best practice in South Africa, we have split the report into two sections:

- **Part one:** remuneration, governance and policy
- **Part two:** remuneration outcomes during the year under review.

As before, this remuneration report continues to focus on the remuneration of executive directors and prescribed officers as well as on the fees paid to non-executive directors. We rely on carefully designed variable pay structures which require certain levels of performance against activities that are of primary importance to the sustainability and success of our business. We continually reassess these measures to ensure that they are aligned with our group strategy. We also give an overview of our employee share-option scheme, the Tlhakanelo Employee Share Trust, which aims to give our non-managerial employees an opportunity to benefit as Harmony shareholders.

For more on the committee and its activities during the year under review see the governance report on page 176 of the Integrated Annual Report 2015.

**Cathie Markus**  
Chairman, remuneration committee  
23 October 2015

## PART ONE: REMUNERATION, GOVERNANCE AND POLICY

### REMUNERATION COMMITTEE

The remuneration committee is the custodian of Harmony's remuneration policy and its implementation.

No member of the committee has a personal interest in the outcome of decisions made, and five of its six members are independent non-executive directors.

For more information on the composition, primary functions, activities and actions of this committee, refer to the Corporate Governance section on page 172. The terms of reference of this committee are available at [www.harmony.co.za/sustainability/governance#policies](http://www.harmony.co.za/sustainability/governance#policies).

#### The main focus areas for the remuneration committee during the year were as follows:

- Review the short-term incentive scheme and the applicable performance measures
- Review the long-term incentive scheme, including the use of share appreciation rights, and the performance measures applied to performance shares
- Executive and non-executive remuneration benchmarking
- Review of and engagement on shareholder concerns
- Approval and recommendation of the remuneration report

### HARMONY'S REMUNERATION POLICY – ALIGNED WITH STRATEGY

Harmony's reward strategy underpins our business strategy of producing profitable ounces, safely. In order to achieve this, we rely on experienced, skilled teams who live our values and play their role in maintaining stakeholder relationships, in growing profits, and in maintaining a sustainable company.

Our remuneration policy has been designed with this strategy in mind – to attract and retain these experienced, skilled teams, and to motivate them to deliver superior performance and achieve our key business goals. To ensure that this happens, we need to be certain that all elements of our remuneration and wider reward offerings are market competitive and properly calibrated.

In determining remuneration, the remuneration committee takes into account shareholders' interests and the financial health of the company.

### BOARD REMUNERATION (NON-EXECUTIVE DIRECTORS)

Harmony's philosophy regarding the remuneration of non-executive directors is to ensure that they are fairly rewarded for their contributions to the company's overall performance.

Non-executive directors' fees are reviewed annually to ensure that they remain competitive. In line with the recommendations of King III, our non-executive directors are paid a retainer for board meetings and an attendance fee for every board meeting attended. Non-executive directors also receive a retainer for serving on a committee. In addition, an ad hoc fee is paid for special meetings or attendance to company business, per day.

Non-executive directors, including the chairman, do not receive share options or other incentive awards correlated with the share price or group performance as these may impair their ability to provide impartial oversight and advice.

The proposed fees for FY16 are set out in the notice of annual general meeting on page 30 in the Report to Shareholders 2015.

# REMUNERATION REPORT CONTINUED

## REMUNERATION MIX AT HARMONY

Harmony chooses to adopt an integrated approach to rewarding its employees.

The graphs below illustrate the designed outcome of the total remuneration package for the chief executive officer, financial director, executive director and prescribed officers, based on achieving targeted performance. The guaranteed pay, short-term incentives and long-term incentives are expressed as a percentage of total remuneration.

**On target pay mix – chief executive (%)**



Long-term incentives **32**  
Short-term incentives **23**  
Guaranteed pay **45**

**On target pay mix – financial director, executive director, prescribed officers (%)**



Long-term incentives **25**  
Short-term incentives **25**  
Guaranteed pay **50**

The graphs depicting actual payment can be found in Part Two, on page 196 of this Remuneration Report.

These elements of the remuneration package are discussed in more detail below:

## KEY ELEMENTS OF HARMONY'S REMUNERATION STRUCTURE

Reward elements	Remuneration strategy
<b>Guaranteed pay</b>	<p>In reviewing and approving levels of guaranteed pay, the committee ensures that the guaranteed pay portion of remuneration is aligned with similar roles in the market sector in which we operate and the contribution made by employees.</p> <p>To compete effectively for skills in a challenging employment market, we identify the target market against which to benchmark guaranteed pay. This target market includes those organisations or companies that employ similar skills sets to those which we require. Comparisons are made predominantly with the mining and resources sectors to ensure that Harmony is competitive.</p> <p>Harmony aims for guaranteed pay levels relative to the median of the target market.</p> <p>Guaranteed pay is inclusive of contributions by the company to a retirement fund and a medical aid scheme.</p>

Reward elements	Remuneration strategy
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**Short-term incentive** The short-term incentive scheme provides for bonus payments. Bonus payments are:

- based on team performance against annual targets that are reviewed annually
- paid twice a year for all management employees in corporate, central services, medical services and central operations (including executive directors and prescribed officers)
- paid quarterly for designated shaft management team members and regional operations management teams

The targets on which bonus payments are based are derived from the company's business plan which is developed in terms of the company's strategic objectives for the year. For executive management, the measures and weightings are as follows:

Performance drivers	Weighting
Gold produced	40%
Total cost R/kg	30%
Underground grade	30%

*Payment parameters:*

To achieve a minimum qualification for a bonus, Harmony must achieve at least 90% of that business plan target for a performance driver. On-target performance can result in a total bonus of 50% of guaranteed pay.

Above-target performance is capped at 100% of guaranteed pay as illustrated below:

% of business plan achieved	% of 6-month guaranteed pay	Parameter
<90	0	
90	30	Threshold
100	50	Target
110	100	Maximum
>110	100	

Previously, safety improvement was measured against the fatal injury frequency rate. We have re-evaluated this measure and consider the lost-time injury frequency rate to be a more comprehensive measure of safety and have, accordingly, incorporated a measure based on improvement of the lost-time injury frequency rate.

Safety performance is applied as an adjustment in the calculation of our short-term incentive bonuses. The company's lost-time injury frequency rate for the total South African business plan is used to measure Harmony's safety performance.

If the planned safety target is achieved, 10% will be added to the overall percentage bonus paid. If the company does not achieve its safety target, up to 10% will be deducted from the overall percentage bonus paid as per the gradation scale illustrated below:

Achievement against business plan	% added or deducted from overall bonus percentage *
100	10%
95	5%
90	0%
85	-5%
80	-10%

\*Linear interpolation between these points

# REMUNERATION REPORT CONTINUED

Reward elements	Remuneration strategy
<b>Long-term (share-based) incentive</b>	<p>The Harmony 2006 share plan (the plan) consists of share appreciation rights (SARs), performance shares and restricted shares.</p>

Employees eligible for participation in the plan include executive directors, executive management and management. Non-executive directors may not participate in the plan.

The expected value of the total share reward as a percentage of guaranteed pay is:

- 70% for the chief executive officer
- 50% for the executives and prescribed officers

There is no repricing or surrender or re-grant of any offers. Share awards are not granted in a closed period and no backdating of awards is allowed. Rewards are settled in shares, although participants may receive, via our share scheme administrators, cash from the sale of these shares, less tax payable.

The main elements of the share plan and performance conditions are summarised below.

### Share appreciation rights

Eligible employees receive annual allocations, which vest in equal thirds on the third, fourth and fifth anniversaries of such allocations and lapse in the sixth year as illustrated below. The value or reward that accrues is based on the positive appreciation of the share price over time (compared to the issue price) and continued employment. If this criteria is met, the shares become exercisable.

Grant Date	1st Anniversary	2nd Anniversary	3rd Anniversary	4th Anniversary	5th Anniversary	6th Anniversary
–	–	–	1/3 exercisable	1/3 exercisable	1/3 exercisable	All unexercised SARs lapse

The company acknowledges shareholders' sentiment with regard to the issuing of share appreciation rights. Such views will be considered should the company issue new share appreciation rights to executive management going forward.

### Performance shares

Eligible employees receive annual conditional awards of a maximum number of performance shares. The conditional award vests after three years, if and to the extent that performance conditions have been satisfied. The conditional awards that do not vest at the end of the three year period will be forfeited.

Awards made since November 2014 will be tested over the full three-year performance period and will be measured on the total shareholder return of the company compared to that of the gold index as follows:

Performance	Achievement	Vesting
Full (stretch)	Outperform gold index by 20%	100%
Target	Match gold index	75%
Threshold	Underperform gold index by 20%	0%

Linear interpolation will apply between levels.

Performance measures, for awards made prior to November 2014, were based on the company's gold production and relative share price performance against certain South African gold mining companies. The awards were assessed and calculated annually, and accumulated over the three-year period.

Details of the awards made during FY15 can be found in Part Two of this Remuneration Report, on page 196.

Reward elements	Remuneration strategy
<b>Long-term (share-based) incentive</b> <i>continued</i>	<p><b>Restricted shares</b></p> <p>The share plan allows for restricted shares and matching performance shares to be granted to eligible employees at the discretion of the board. The board determines the quantum and balance between restricted shares and matching performance shares.</p> <p>Restricted shares vest three years from the grant date. If the grant is not exercised, partially or fully at the time, these shares remain restricted for a further three years and are supplemented by a matching grant of restricted shares. All restricted shares are then only settled after the end of a further three-year period.</p> <p>The last award of new restricted shares was made in 2012.</p> <p>The company acknowledges shareholders' sentiment with regard to the issuing of restricted shares. Such views will be considered should the company issue new restricted shares going forward.</p> <p><b>Plan limit</b></p> <p>The approved aggregate number of shares that may be acquired by participants in the long-term incentive plan, together with any other share plan or scheme are 60 011 669 shares as approved by the members of the company at an annual general meeting held on 1 December 2010. To date, Harmony has used 6 680 515 of these approved shares.</p> <p>The aggregate number of shares that may be acquired by any one participant in terms of the long-term incentive plan together with any other share plan or scheme approved by the members shall not exceed 2 100 000 shares. To date, none of the participants has acquired an aggregate of more than 2 100 000 shares.</p> <p><b>Proposed changes to the share plan</b></p> <p>A proposal will be made at the forthcoming annual general meeting to amend the share plan in relation to the treatment of retiring executive management participants in respect of all future grants. It is proposed that, on retirement, the vesting of allocated shares will not be accelerated. This will ensure that participants approaching retirement remain motivated to perform according to the performance conditions, and put in place succession planning and ensure sustainability, so that shareholder value continues to be maintained and created after they retire.</p> <p>For more information refer to the notice of the annual general meeting in the Report to Shareholders 2015 <a href="http://www.har.co.za/15/download/HAR-RS15.pdf">www.har.co.za/15/download/HAR-RS15.pdf</a>.</p>
<b>Tlhakanelo Employee Share Trust</b>	<p>Administered in terms of the Tlhakanelo trust, this share-based incentive scheme ensures that current and future qualifying employees participate in Harmony's growth. Qualifying employees are those who are permanently employed by the company and who do not participate in any of the company's other share incentive schemes.</p> <p>Under the Tlhakanelo employee share scheme, each award is split into the ratio of two share appreciation rights for each ordinary share and these vest annually in equal tranches on each anniversary of the allocation date. As per the provisions of the trust deed, the last tranche of shares allocated in terms of the scheme will vest during March 2017.</p> <p>Share appreciation rights are subject to a guaranteed minimum payout of R18 per share appreciation right and a maximum payout of R32 per share appreciation right on each vesting date (over the five-year period).</p> <p>Prior to vesting, participants may elect to receive their shares or have these sold on their behalf.</p> <p>Details of the awards made during FY15 can be found in Part Two of this Remuneration Report, on page 196.</p>

# REMUNERATION REPORT CONTINUED

## CONTRACTS, SEVERANCE AND TERMINATION

Executive directors and executive managers have employment contracts with Harmony which include notice periods of up to 180 days. There are no balloon payments on termination, automatic entitlement to bonuses or automatic entitlement to share-based payments other than in terms of the company's approved share incentive plans.

## NON-BINDING ADVISORY VOTE

Shareholders are requested to cast a non-binding advisory vote required by King III on Part One of this remuneration report as it appears above. For more information refer to the notice of the annual general meeting in the Report to Shareholders 2015 [www.har.co.za/15/download/HAR-RS15.pdf](http://www.har.co.za/15/download/HAR-RS15.pdf).

## STAKEHOLDER FEEDBACK

We maintain open communication channels with our stakeholders, listen to feedback and take action where this is deemed to be in the best interests of the company. Based on comments received from shareholders following our FY14 remuneration report, we have enhanced our reporting and changed the parameters of our short-term and long-term incentive schemes.

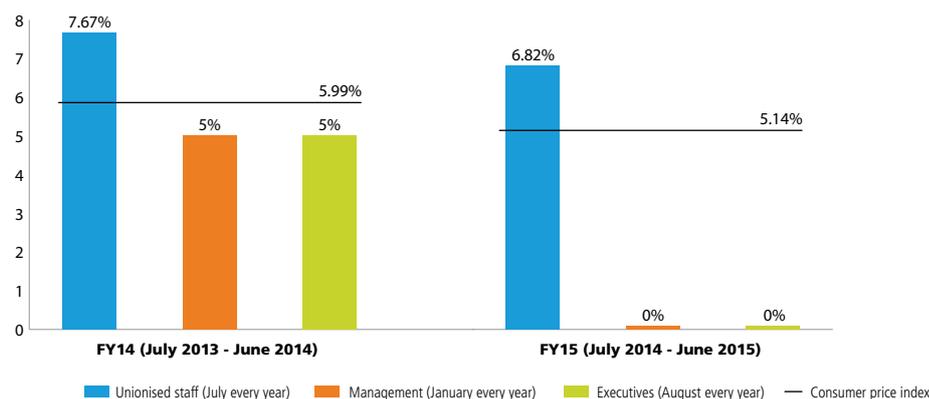
## PART TWO: REMUNERATION PAID DURING THE YEAR BASED ON THE POLICY APPLICABLE AND APPROVED BY SHAREHOLDERS IN 2014

### INCREASES TO GUARANTEED PACKAGE DURING THE YEAR UNDER REVIEW

An assessment of executive remuneration, and short- and long-term incentives was undertaken during FY15. This assessment was used to benchmark remuneration at Harmony and align it with prevailing market conditions and shareholders' expectations. The survey was conducted by an independent external service provider.

Taking into consideration the prevailing market conditions, affordability and shareholders' expectations, no increases were made to the guaranteed remuneration packages of executives and management during FY15. Illustrated below are the average percentage increases awarded during FY14 and FY15 to executives, management and unionised staff:

Unionised staff, management and executive – average salary increase FY14 to FY15 (%)



## SHORT-TERM INCENTIVE PAYMENTS DURING THE YEAR UNDER REVIEW

During the year under review, achievement levels against the targets for the executive short-term incentive scheme were as follows:

### First period FY15 (July to December 2014)

Company performance measures	Weighting	% of plan achieved	Weighted %
Total kilograms	40	92	13.60
Total cost (R/kg)	30	93	10.80
Grade	30	102	18.00
Weighted average	–	–	42.4
Lost-time injury frequency rate adjustment			-10
Percentage of six-months' guaranteed pay			<b>32.4</b>

### Second period FY15 (January to June 2015)

Company performance measures	Weighting	% of plan achieved	Weighted %
Total kilograms	40	83	0
Total cost (R/kg)	30	74	0
Grade	30	96	12.60
Weighted average	–	–	12.60
Lost-time injury frequency rate adjustment			-10
Percentage of six-months' guaranteed pay			<b>2.6</b>

## LONG-TERM INCENTIVES AWARDED DURING THE YEAR UNDER REVIEW

During FY15, share appreciation rights, performance shares and matching restricted shares were granted in November 2014.

**Share appreciation rights:** The value or reward that accrues on share appreciation rights is based on the positive appreciation of the share price over time compared to the issue price.

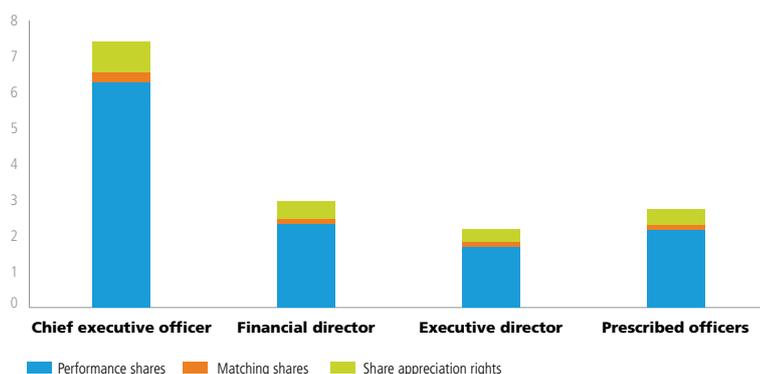
**Performance shares:** The performance measure applicable to performance awards is based on Harmony's total shareholder return compared to that of the gold index over the three-year period.

**Matching shares:** Although no further grants of restricted shares have been made since 2012, restricted shares not exercised were supplemented with matching shares.

The number of grants awarded for each executive director, prescribed officer and executive management is as set out in the table on page 200 of this report.

The fair values at date of grant for awards made during FY15 are illustrated below:

### Fair value of grant awarded November 2014\* (Rm)



\*Fair value has been determined per the requirement of the International Financial Reporting Standards

# REMUNERATION REPORT CONTINUED

## VESTING OF LONG-TERM INCENTIVES DURING THE YEAR UNDER REVIEW

During the year, the following awards in terms of the long-term incentive plan vested in November 2014:

- **Share appreciation rights allocated in November 2011**

The performance condition determined that the headline earnings per share growth from the allocation date should exceed the consumer price index. Headline earnings over the duration of the 2011 share appreciation right period, being the three years ending June 2014, exceeded headline earnings in the comparative three-year period by more than the consumer price index. The performance condition was therefore met and vesting occurred on the third anniversary.

- **Performance shares awarded in November 2011**

The vesting percentage of performance shares was based on the achievement of two conditions, namely gold production against plan and relative share price performance against South African gold mining companies.

This resulted in a total vesting of 27.5% of performance shares granted in November 2011 calculated as follows:

- Gold production has a maximum vesting of 50% and a minimum vesting of 0%. The company achieved 82%, 92% and 87% of plan over the three consecutive years which resulted in an average vesting of 15%.
- The company underperformed against its peers on the basis of its relative share price performance which resulted in vesting of 12.5%.

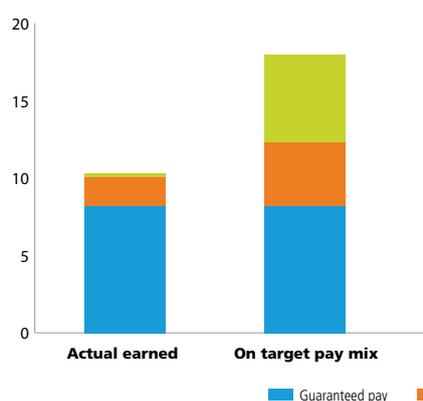
- **Restricted shares granted in November 2011**

Grants were not exercised and remained restricted for a further three years.

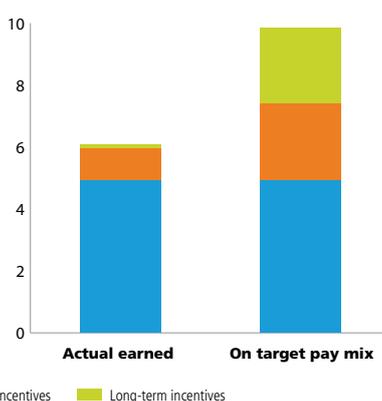
## TOTAL REMUNERATION OUTCOMES

The compositions of total remuneration outcomes for FY15 for the chief executive officer and financial director are illustrated below:

**Total remuneration – chief executive officer (Rm)**



**Total remuneration – financial director (Rm)**



## PAYMENTS MADE THROUGH THE TLHAKANELO EMPLOYEE SHARE TRUST

Incentives	As at 30 June 2015:	Total since incorporation of the trust:
Value of ordinary shares sold and proceeds paid to participants (before tax)	R17 million	R101 million
Value of bonus payments paid to participants by Harmony based on R18 per share appreciation right (before tax). No sale of shares – shares were underwater	R27 million	R88 million
Total payments received by participants (value of share plus share appreciation rights bonus) (before tax)	R44 million	R189 million

## NON-EXECUTIVE DIRECTORS' FEES

During August 2015, the remuneration committee considered an industry benchmark on non-executive directors' fees. On the recommendation of the remuneration committee, the board proposed that an increase of 5% in the fees for all non-executive directors, and no increase for the chairman of the board, be considered for approval by the shareholders at the forthcoming annual general meeting. For more information on the notice of the annual general meeting refer to the Report to Shareholders 2015 [www.har.co.za/15/download/HAR-RS15.pdf](http://www.har.co.za/15/download/HAR-RS15.pdf).

## DIRECTORS' EMOLUMENTS

### Directors' remuneration

Name	Directors' fees	Salaries and benefits	Retirement contributions during the year	'Bonuses paid	Total	Total
	(R000)	(R000)	(R000)	(R000)	(R000)	(R000)
	FY15	FY15	FY15	FY15	FY15	FY14
<b>Non-executive</b>						
Patrice Motsepe	1 077	–	–	–	1 077	998
Joaquim Chissano	415	–	–	–	415	369
Fikile De Buck	836	–	–	–	836	773
Ken Dicks	482	–	–	–	482	396
Dr Simo Lushaba	615	–	–	–	615	573
Cathie Markus	705	–	–	–	705	627
Modise Motloba	841	–	–	–	841	763
Mavuso Msimang	443	–	–	–	443	397
Karabo Nondumo	561	–	–	–	561	422
Vishnu Pillay	472	–	–	–	472	378
John Wetton	789	–	–	–	789	712
Andre Wilkens	637	–	–	–	637	550
<b>Executive</b>						
Frank Abbott	–	4 925	–	1 039	5 964	6 346
Graham Briggs	–	8 187	–	1 825	10 012	10 141
Mashego Mashego	–	3 650	368	779	4 797	4 824
<b>Prescribed officers</b>						
Alwyn Pretorius <sup>2</sup>	–	4 333	513	977	5 823	1 569
Tom Smith <sup>3</sup>	–	–	–	–	–	4 808
Johannes van Heerden <sup>4</sup>	–	5 136	172	811	6 119	6 326
<b>Executive management</b>	–	16 540	1 255	3 148	20 943	24 715
<b>Total</b>	<b>7 873</b>	<b>42 771</b>	<b>2 308</b>	<b>8 579</b>	<b>61 531</b>	<b>65 687</b>

<sup>1</sup> Reflects amounts paid during the year

<sup>2</sup> Amount in FY14 represents remuneration since appointment as a prescribed officer in March 2014. Remuneration prior to appointment included in Executive management

<sup>3</sup> Prescribed officer until March 2014

<sup>4</sup> Salary is paid in Australian dollars and is influenced by the movement in the exchange rate



**EXECUTIVE DIRECTORS AND MANAGEMENT SHARE INCENTIVES** *continued*  
**As at 30 June 2015**

	Executive directors						Prescribed officers						Other		Total	
	Graham Briggs		Frank Abbott		Mashego Mashego		Alwyn Pretorius		Johannes van Heerden		Executive management		Other management			
Outstanding awards (listed by grant date)	Number of shares	Average price (Rands)	Number of shares	Average price (Rands)	Number of shares	Average price (Rands)	Number of shares	Average price (Rands)	Number of shares	Average price (Rands)	Number of shares	Average price (Rands)	Number of shares	Average price (Rands)	Number of shares	Average price (Rands)
<b>Performance shares</b>	<b>1 187 604</b>		<b>437 195</b>		<b>314 790</b>		<b>356 547</b>		<b>314 790</b>		<b>1 241 174</b>		<b>10 470 408</b>		<b>14 322 508</b>	
27 September 2012	6 160	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	6 160	n/a
16 November 2012	137 275	n/a	57 067	n/a	40 471	n/a	40 471	n/a	40 471	n/a	159 571	n/a	1 196 802	n/a	1 672 128	n/a
15 November 2013	482 952	n/a	172 666	n/a	124 604	n/a	124 604	n/a	124 604	n/a	491 299	n/a	4 041 830	n/a	5 562 559	n/a
17 November 2014	561 217	n/a	207 462	n/a	149 715	n/a	191 472	n/a	149 715	n/a	590 304	n/a	5 231 776	n/a	7 081 661	n/a
<b>Restricted shares</b>	<b>190 456</b>		<b>37 136</b>		<b>27 694</b>		<b>27 694</b>		<b>72 218</b>		<b>138 932</b>		<b>178 972</b>		<b>673 102</b>	
15 November 2010	48 485	n/a	–	n/a	–	n/a	–	n/a	22 262	n/a	26 413	n/a	30 606	n/a	127 766	n/a
15 November 2011	15 000	n/a	8 000	n/a	8 000	n/a	8 000	n/a	8 000	n/a	20 000	n/a	20 000	n/a	87 000	n/a
27 September 2012	30 802	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	30 802	n/a
16 November 2012	32 684	n/a	21 136	n/a	11 694	n/a	11 694	n/a	11 694	n/a	46 106	n/a	81 760	n/a	216 768	n/a
15 November 2013	48 485	n/a	–	n/a	–	n/a	–	n/a	22 262	n/a	26 413	n/a	30 606	n/a	127 766	n/a
17 November 2014	15 000	n/a	8 000	n/a	8 000	n/a	8 000	n/a	8 000	n/a	20 000	n/a	16 000	n/a	83 000	n/a
<b>Share appreciation rights</b>	<b>264 390</b>		<b>139 362</b>		<b>112 907</b>		<b>126 933</b>		<b>114 128</b>		<b>444 467</b>		<b>15 217 780</b>		<b>16 419 967</b>	
16 November 2009	14 286	77.28	–	77.28	5 327	77.28	6 548	77.28	6 548	77.28	23 989	77.28	1 166 903	77.28	1 223 601	77.28
15 November 2010	13 939	84.81	–	84.81	6 400	84.81	6 400	84.81	6 400	84.81	22 405	84.81	600 202	84.81	655 746	84.81
15 November 2011	11 676	104.79	6 585	104.79	5 361	104.79	5 361	104.79	5 361	104.79	20 275	104.79	615 610	104.79	670 229	104.79
16 November 2012	25 058	68.84	16 204	68.84	11 694	68.84	11 694	68.84	11 694	68.84	46 106	68.84	1 479 720	68.84	1 602 170	68.84
15 November 2013	91 864	33.18	52 951	33.18	38 212	33.18	38 212	33.18	38 212	33.18	150 665	33.18	5 114 076	33.18	5 524 192	33.18
17 November 2014	107 567	18.41	63 622	18.41	45 913	18.41	58 718	18.41	45 913	18.41	181 027	18.41	6 241 269	18.41	6 744 029	18.41
<b>Closing balance as at 30 June 2015</b>	<b>1 642 450</b>		<b>613 693</b>		<b>455 391</b>		<b>511 174</b>		<b>501 136</b>		<b>1 824 573</b>		<b>25 867 160</b>		<b>31 415 577</b>	

# AUDIT AND RISK COMMITTEE CHAIRMAN'S REPORT



**John Wetton**  
Chairman, audit and risk committee

I have pleasure in submitting this report for the financial year ended 30 June 2015, in accordance with the Companies Act 71 of 2008 (the Act). This committee complies with the requirements of the Act pertaining to the composition and functions of an audit committee. In addition, as explained in the committee's terms of reference, Harmony's audit committee is also tasked with overseeing risk management in the company and is therefore known as the audit and risk committee.

## COMPOSITION OF THE COMMITTEE

In terms of the Act, the following members, who were serving on the committee as at 30 June 2015, will be recommended for re-appointment as audit and risk committee members for FY16 to shareholders at the company's annual general meeting:

Name	Status	Date appointed
John Wetton (chairman)	Independent non-executive director	1 July 2011, appointed chairman 30 November 2011
Fikile De Buck	Lead independent non-executive director	30 March 2006
Dr Simo Lushaba	Independent non-executive director	24 January 2003
Modise Motloba	Independent non-executive director	30 July 2004
Karabo Nondumo	Independent non-executive director	3 May 2013

The individuals proposed satisfy the requirements set out in section 94 of the Act for members of an audit committee, and their appointment will ensure that the committee continues to have adequate and relevant knowledge as well as the experience required for the committee to perform its functions proficiently. For details of the qualifications, expertise and experience of the members of the audit and risk committee refer to their curricula vitae in the Board and Management section on page 28 of the Integrated Annual Report 2015.

## PURPOSE, ROLE AND ACTIVITIES

The purpose and role of the audit and risk committee are in accordance with the requirements of the Act, the JSE Listings Requirements, King III and additional requirements imposed on the committee by the board. Further details can be found in the committee's terms of reference available on Harmony's website at [www.harmony.co.za/sustainability/governance#policies](http://www.harmony.co.za/sustainability/governance#policies).

The committee undertakes its duties with accountability to both the board and the company's stakeholders. The committee met five times during the past financial year, during which and in accordance with its terms of reference and work plan, the committee:

- Reviewed the company's quarterly and annual financial results
- Evaluated and considered Harmony's risks, as well as measures taken to mitigate those risks. In addition, the committee also considered and refined the company's risk appetite and tolerance levels
- Monitored the internal control environment in Harmony and found it to be effective
- Discussed the appropriateness of accounting principles, critical accounting policies, management judgements, estimates and impairments, all of which were found to

be appropriate

- Considered the appointment of the external auditor, PricewaterhouseCoopers Inc, as the registered independent auditor for the ensuing year. A new PwC audit partner would be appointed from FY16 as a result of the compulsory rotation of Faan Lombard, who had served as Harmony's audit partner for the past five years. The committee thanks Faan for his service during this period
- Satisfied itself, and confirmed through enquiry, that the external audit firm, PricewaterhouseCoopers Inc, was independent from the company
- Evaluated the independence and effectiveness of the internal audit function
- Evaluated and coordinated the internal audit, external audit and sustainability assurance processes
- Received and considered reports from the external and internal auditors
- Reviewed and approved internal and external audit plans, terms of engagement and fees, as well as the nature and extent of non-audit services rendered by the external auditors
- Considered the appropriateness and expertise of the financial director, Frank Abbott, as well as that of the finance function – both were found to be adequate and appropriate
- Considered whether information technology risks are adequately addressed and whether appropriate controls are in place to address these risks. The committee oversees and monitors the governance of information technology on behalf of the board, a task it views as a critical aspect of risk management
- Considered and confirmed the company as a going concern
- Oversaw the process of assurance of the integrated report

The audit and risk committee is confident that it complied with the legal, regulatory and other responsibilities assigned to it by the board, under its terms of reference in accordance with the Act, the JSE Listings Requirements and King III.

The internal audit function reports directly to the audit and risk committee, except on administrative matters about which it reports to the executive: risk management and services improvement. The internal and external auditors attend the committee's quarterly meetings and have unrestricted access to the chairman of the committee. The audit and risk committee met privately with the internal and external auditors during FY15.

Post year-end, on recommendation from the audit and risk committee, the board approved:

- The Annual Financial Statements and Summarised Consolidated Financial Statements for the year ended 30 June 2015. The audit and risk committee reviewed these statements to ensure they presented a true, balanced and plausible assessment of the financial position and performance of Harmony
- The Integrated Annual Report for the year ended 30 June 2015, in accordance with King III and the JSE Listings Requirements
- The annual report filed on Form 20-F for the year ended 30 June 2015 for subsequent submission to the United States Securities and Exchange Commission
- The notice of the annual general meeting to be held on 20 November 2015

For more on the committee and its activities during the year under review see page 175 of the Integrated Annual Report 2015.

### **John Wetton**

**Audit and risk committee chairman**

23 October 2015



# ASSURANCE REPORT

## INDEPENDENT ASSURANCE REPORT TO THE DIRECTORS OF HARMONY GOLD MINING COMPANY LIMITED

We have been engaged by the directors of Harmony Gold Mining Company Limited ("Harmony" and/or the "Company") to perform an independent assurance engagement in respect of Selected Sustainability Information reported in the Company's Integrated Annual Report for the year ending 30 June 2015 (the "Report"). This report is produced in accordance with the terms of our contract with the Company dated 25 February 2015.

### INDEPENDENCE AND EXPERTISE

We have complied with the International Federation of Accountants' (IFAC) Code of Ethics for Professional Accountants, which includes comprehensive independence and other requirements founded on fundamental principles of integrity, objectivity, and professional competence and due care, confidentiality and professional behaviour. Our engagement was conducted by a multi-disciplinary team of health, safety, environmental and assurance specialists with extensive experience in sustainability reporting.

### SCOPE AND SUBJECT MATTER

The subject matter of our engagement and the related levels of assurance that we are required to provide are as follows:

#### Reasonable assurance

The following Selected Sustainability Information in the Report was selected for an expression of reasonable assurance:

- Electricity purchased (kWh)
- Total Scope 2 carbon emissions (tCO<sub>2</sub>e)
- Preferential procurement – black economic empowerment total spend (South African rands)
- Local economic development spend (South African rands)
- Employment equity in management in South Africa (%)

Refer to "How we performed" on page 8 for all of these indicators.

#### Limited assurance

The following Selected Sustainability Information in the Report was selected for an expression of limited assurance:

- Housing and living conditions in South Africa – % conversion
- Water used for primary activities (kilolitres)
- Volume of mineral waste disposed (tonnes)
- Lost-time injury frequency rate
- Total injuries and accidents – number of injury cases in the 2015 reporting period
- Silicosis – number of cases confirmed in the 2015 reporting period
- Critical skills training – number of people trained in the 2015 reporting period
- Total Scope 1 carbon emissions (tCO<sub>2</sub>e)
- Total Scope 3 carbon emissions (tCO<sub>2</sub>e)

Refer to "How we performed" on page 8 for all of these indicators.

We refer to this information as the "Selected Sustainability Information for Reasonable Assurance" and the "Selected Sustainability Information for Limited Assurance", respectively, and collectively as the "Selected Sustainability Information".

We have carried out work on the data reported for 30 June 2015 only and have not performed any procedures with respect to earlier periods, except where specifically indicated, or any other elements included in the Integrated Annual Report 2015 and, therefore, do not express any conclusion thereon. We have not performed work in respect of future projections and targets.

#### **RESPECTIVE RESPONSIBILITIES OF THE DIRECTORS AND PRICEWATERHOUSECOOPERS INC.**

The directors are responsible for selection, preparation and presentation of the Selected Sustainability Information in accordance with the criteria set out in the company's internally defined procedures and captured in the Glossary of Terms on page 222, (referred to as the "Reporting Criteria"), and for the development of the Reporting Criteria. The directors are also responsible for designing, implementing and maintaining of internal controls as the directors determine is necessary to enable the preparation of the Selected Sustainability Information that are free from material misstatements, whether due to fraud or error.

Our responsibility is to form an independent conclusion, based on our reasonable assurance procedures, on whether the Selected Sustainability Information for Reasonable Assurance has been prepared, in all material respects, in accordance with the Reporting Criteria.

We further have a responsibility to form an independent conclusion, based on our limited assurance procedures, on whether anything has come to our attention to indicate that the Selected Sustainability Information for Limited Assurance has not been prepared, in all material respects, in accordance with the Reporting Criteria.

This report, including the conclusions, has been prepared solely for the directors of the Company as a body, to assist the directors in reporting on the Company's sustainable development performance and activities. We permit the disclosure of this report within the Report for the year ended 30 June 2015, to enable the directors to demonstrate they have discharged their governance responsibilities by commissioning an independent assurance report in connection with the Report. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the directors as a body and the company for our work or this report save where terms are expressly agreed and with our prior consent in writing.

#### **ASSURANCE WORK PERFORMED**

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements 3000: Assurance Engagements other than Audits and Reviews of Historical Financial Information (ISAE 3000), and, in respect of greenhouse gas emissions, International Standard on Assurance Engagements 3410: Assurance Engagements on Greenhouse Gas Statements (ISAE 3410), issued by the International Auditing and Assurance Standards Board. These standards require that we comply with ethical requirements and that we plan and perform the assurance engagement to obtain either reasonable or limited assurance on the Selected Sustainability Information as per the terms of our engagement.

Our work included examination, on a test basis, of evidence relevant to the Selected Sustainability Information. It also included an assessment of the significant estimates and judgements made by the directors in the preparation of the Selected Sustainability Information. We planned and performed our work so as to obtain all the information and explanations that we considered necessary in order to provide us with sufficient evidence on which to base our conclusion in respect of the Selected Sustainability Information.

# ASSURANCE REPORT CONTINUED

Our work in respect of the Selected Sustainability Information for Reasonable Assurance included the following procedures:

- reviewing the processes that Harmony have in place for determining the Selected Sustainability Information included in the Report;
- obtaining an understanding of the systems used to generate, aggregate and report the Selected Sustainability Information;
- conducting interviews with management at corporate head office;
- evaluating the data generation and reporting processes against the Reporting Criteria;
- performing key controls testing and testing the accuracy of data reported on a sample basis; and
- reviewing the consistency between the Selected Sustainability Information and related statements in Harmony's Report

Our procedures relating to the Selected Sustainability Information for Limited Assurance primarily comprised:

- reviewing the processes that Harmony have in place for determining the Selected Sustainability Information included in the Report;
- obtaining an understanding of the systems used to generate, aggregate and report the Selected Sustainability Information;
- conducting interviews with management at corporate head office;
- evaluating the data generation and reporting processes against the Reporting Criteria;
- performing key controls testing and testing the accuracy of data reported on a sample basis; and
- reviewing the consistency between the Selected Sustainability Information and related statements in Harmony's Report

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement under ISAE 3000. Consequently, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement, and therefore less assurance is obtained with a limited assurance engagement than for a reasonable assurance engagement.

The procedures selected depend on our judgement, including the assessment of the risk of material misstatement of the Selected Sustainability Information, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the Company's preparation of the Selected Sustainability Information in order to design procedures that are appropriate in the circumstances.

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

## **INHERENT LIMITATIONS**

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

In particular, where the information relies on factors derived by independent third parties, our assurance work has not included examination of the derivation of those factors and other third party information.

## **CONCLUSIONS**

### **Reasonable assurance**

Based on the results of our reasonable assurance procedures, in our opinion, the Selected Sustainability Information for the year ended 30 June 2015, has been prepared, in all material respects, in accordance with the Reporting Criteria.

### **Limited assurance**

Based on the results of our limited assurance procedures nothing has come to our attention that causes us to believe that the Selected Sustainability Information for the year ended 30 June 2015, has not been prepared, in all material respects, in accordance with the Reporting Criteria.

### **Other matters**

The maintenance and integrity of Harmony's website is the responsibility of Harmony's directors. 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 Harmony website.



**PricewaterhouseCoopers Inc.**

**Registered Auditor**

Director: Jayne Mammatt

Johannesburg

23 October 2015



# DIRECTORS' REPORT

## OUR BUSINESS

The Harmony group of companies has underground and surface operations and conducts gold mining and exploration in South Africa and Papua New Guinea. A general review of the group's business and operations is provided on page 120 of the Integrated Annual Report 2015 (the report).

The company does not have a controlling shareholder and is managed by its directors on behalf of all of its shareholders. The company's primary listing is in South Africa on the securities exchange operated by the JSE Limited. Harmony's ordinary shares are also listed in the form of American Depositary Receipts on the New York Stock Exchange and as International Depositary Receipts on the Berlin exchange.

## ANNUAL INTEGRATED REPORT 2015

As required by the King Report on Governance for South Africa and the King Code of Governance Principles (King III) and the JSE Listings Requirements, the board has reviewed and approved the Integrated Annual Report 2015 on the recommendation of the audit and risk committee.

## STATEMENT BY THE BOARD

The board of directors is of the opinion that the Integrated Annual Report 2015 and the accompanying consolidated financial statements fairly reflect the true financial position of the group at 30 June 2015 and its performance for the year.

## COMPANY SECRETARY

The company secretary is Riana Bisschoff. Her business and postal addresses appear on the inside back cover of this report. The company secretary's certificate is found on page 209 of the report.

## BOARD OF DIRECTORS

There were no changes to the board during FY15.

## DIRECTORS' SHAREHOLDINGS

At 30 June 2015, the chief executive officer, Graham Briggs held 24 718 shares, the financial director, Frank Abbott held 203 243 shares and executive director, Mashego Mashego, held 3 096 shares in Harmony while non-executive directors André Wilkens and Ken Dicks, held 101 303 and 20 000 shares in Harmony respectively. None of the directors' immediate families and associates held any direct shareholding in the company's issued share capital. No other director held or acquired any shares in the company, other than through share incentive schemes (executive directors only), during FY15.

## GOING CONCERN

In accordance with the solvency and liquidity test in terms of section 4 of the Companies Act, the board is of the opinion that the company has adequate resources and that:

- the company's assets, fairly valued, exceed the fair value of its liabilities
- the company will be able to pay its debts as they become due in the ordinary course of business for the 12 months following 30 June 2015

## FINANCIAL RESULTS

Details of the group's financial performance are discussed in the financial director's review, on page 18 of this report.

## SHARE CAPITAL

Full details of the authorised, issued and unissued share capital of the company as at 30 June 2015 are set out in the consolidated statements of changes in shareholders' equity in the Financial Report 2015 ([www.har.co.za/15/download/HAR-FR15.pdf](http://www.har.co.za/15/download/HAR-FR15.pdf)).

## SHAREHOLDERS

Information on shareholder spread, the range of shareholdings and public shareholders, as well as major shareholders, is presented in the shareholders' information section on page 220 of the Integrated Annual Report 2015.

## INVESTMENTS

A schedule of investments in subsidiaries, associates and joint arrangements appears in the Financial Report 2015 which is available online at [www.har.co.za/15/download/HAR-FR15.pdf](http://www.har.co.za/15/download/HAR-FR15.pdf)

## CONTINGENCIES

None of Harmony's properties is the subject of pending material legal proceedings. We are involved in legal and arbitration proceedings that are incidental to the normal conduct of our business. Refer to note 33 of the consolidated financial statements for further discussion.

## BORROWINGS

- (i) Movement in borrowings: see note 27 to the consolidated financial statements
- (ii) Borrowing powers are detailed in the company's memorandum of incorporation

## DISPOSALS

There were no material disposals during FY15.

## RELATED PARTY TRANSACTIONS

None of the directors or major shareholders of Harmony or, to Harmony's knowledge, their families, had an interest, directly or indirectly, in any transaction during the period under review or in any proposed transaction that has affected or will materially affect Harmony or its subsidiaries, other than as stated below.

African Rainbow Minerals Limited currently holds 14.59% of Harmony's shares. The following directors of Harmony are directors of African Rainbow Minerals Limited as well: Patrice Motsepe, André Wilkens, Frank Abbott and Joaquim Chissano.

## MATERIAL TRANSACTIONS WITH ASSOCIATES, JOINT ARRANGEMENTS AND STRUCTURED ENTITIES

All transactions with related parties are conducted at arm's length. Refer to note 32 of the consolidated financial statements for details on transactions conducted during the period under review.

## RECENT DEVELOPMENTS

Subsequent to year end, Harmony provided guarantees to the value of R150 million in favour of Nedbank Limited on behalf of the ARM Broad-Based Economic Empowerment Trust (ARM BBEE Trust). The guarantees are in support of the financial covenants of the ARM BBEE Trust's bank loan. Harmony's support of the ARM BBEE Trust is as a result of its continued commitment to broad-based ownership, an imperative driven strongly by the regulator.

# COMPANY SECRETARY'S CERTIFICATE

In accordance with the Companies Act No 71 of 2008 (the Act) I certify that for the year ended 30 June 2015 Harmony Gold Mining Company Limited, to the best of my knowledge and belief, has lodged with the Companies and Intellectual Property Commission all such returns and notices as are required of a public company in terms of the Act, and that all such returns and notices appear to be true, correct and up to date.

## R BISSCHOFF

Company secretary

23 October 2015

# GLOBAL REPORTING INITIATIVE INDEX

GENERAL STANDARD DISCLOSURES		
General Standard Disclosures	Section reference	External assurance
<b>STRATEGY AND ANALYSIS</b>		
<b>G4-1</b>	Provide a statement from the most senior decision-maker of the organisation (such as chief executive officer, chair, or equivalent senior position) about the relevance of sustainability to the organisation and the organisation's strategy for addressing sustainability	Chairman's letter (p10) Chief executive officer's review (p14) Social and ethics committee chairman's report (p14)
<b>ORGANISATIONAL PROFILE</b>		
<b>G4-3</b>	Report the name of the organisation	Front cover, About this report (p2)
<b>G4-4</b>	Report the primary brands, products, and services	Who Harmony is (p4)
<b>G4-5</b>	Report the location of the organisation's headquarters	Who Harmony is (p4)
<b>G4-6</b>	Report the number of countries where the organisation operates, and names of countries where either the organisation has significant operations or that are specifically relevant to the sustainability topics covered in the report	Who Harmony is (p4)
<b>G4-7</b>	Report the nature of ownership and legal form	Shareholder information (p220)
<b>G4-8</b>	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	Who Harmony is (p4)
<b>G4-9</b>	Report the scale of the organisation, including: a. Total number of employees b. Total number of operations c. Net sales (for private sector organisations) or net revenues (for public sector organisations) d. Total capitalisation broken down in terms of debt and equity (for private sector organisations) e. Quantity of products or services provided	Who Harmony is (p4)
<b>G4-10</b>	Report the composition of the workforce, including: a. Report the total number of employees by employment contract and gender b. Report the total number of permanent employees by employment type and gender c. Report the total workforce by employees and supervised workers and by gender d. Report the total workforce by region and gender e. Report whether a substantial portion of the organisation's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors f. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries)	Employees and communities (p76)
<b>G4-11</b>	Report the percentage of total employees covered by collective bargaining agreements	Employees and communities – Freedom of association (p80)
<b>G4-12</b>	Describe the organisation's supply chain.	Environmental performance – Engagement with suppliers and their environmental impacts (p112) Our business context (p38) Stakeholder engagement: Suppliers of goods and services (p55)

GENERAL STANDARD DISCLOSURES <i>continued</i>		
General Standard Disclosures	Section reference	External assurance
<b>G4-13</b> Report any significant changes during the reporting period regarding the organisation's size, structure, ownership, or its supply chain, including: <ul style="list-style-type: none"> <li>a. Changes in the location of, or changes in, operations, including facility openings, closings, and expansions</li> <li>b. Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organisations)</li> <li>c. Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination</li> </ul>	About this report (p2)	
<b>G4-14</b> Report whether and how the precautionary approach or principle is addressed by the organisation	Managing our risks and opportunities (p41) Environmental performance (p100)	
<b>G4-16</b> List memberships of associations (such as industry associations) and national or international advocacy organisations in which the organisation: <ul style="list-style-type: none"> <li>• Holds a position on the governance body</li> <li>• Participates in projects or committees</li> <li>• Provides substantive funding beyond routine membership dues</li> <li>• Views membership as strategic</li> </ul>	Our business context (p38) Corporate governance (p172) Employees and communities (p76) Environmental performance (p100) Operational performance (p120)	
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES		
<b>G4-17</b> a. List all entities included in the organisation's consolidated financial statements or equivalent documents. b. Report whether any entity included in the organisation's consolidated financial statements or equivalent documents is not covered by the report	About this report (p2) Who Harmony is (p4)	
<b>G4-18</b> a. Explain the process for defining the report content and the aspect boundaries. b. Explain how the organisation has implemented the reporting principles for defining report content	About this report (p2)	
<b>G4-19</b> List all the material aspects identified in the process for defining report content	Managing our risks and opportunities: Material issues (p50) Social and ethics committee chairman's report (p22)	
<b>G4-20</b> For each material aspect, report the aspect boundary within the organisation, as follows: <ul style="list-style-type: none"> <li>• Report whether the aspect is material within the organisation</li> <li>• If the aspect is not material for all entities within the organisation (as described in G4-17), select one of the following two approaches and report either:                             <ul style="list-style-type: none"> <li>• The list of entities or groups of entities included in G4-17 for which the aspect is not material or</li> <li>• The list of entities or groups of entities included in G4-17 for which the aspects is material</li> </ul> </li> </ul> Report any specific limitation regarding the aspect boundary within the organisation	Managing our risks and opportunities: Material issues (p50)	
<b>G4-21</b> For each material aspect, report the aspect boundary outside the organisation, as follows: <ul style="list-style-type: none"> <li>• Report whether the aspect is material outside of the organisation</li> <li>• If the aspect is material outside of the organisation, identify the entities, groups of entities or elements for which the aspect is material. In addition, describe the geographical location where the aspect is material for the entities identified</li> <li>• Report any specific limitation regarding the aspect boundary outside the organisation</li> </ul>	Managing our risks and opportunities: Material issues (p50)	

# GLOBAL REPORTING INITIATIVE INDEX CONTINUED

<b>GENERAL STANDARD DISCLOSURES</b> <i>continued</i>			
<b>General Standard Disclosures</b>		<b>Section reference</b>	<b>External assurance</b>
<b>G4-22</b>	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements	About this report (p2)	
<b>G4-23</b>	Report significant changes from previous reporting periods in the scope and aspect boundaries	About this report (p2)	
<b>STAKEHOLDER ENGAGEMENT</b>			
<b>G4-24</b>	Provide a list of stakeholder groups engaged by the organisation	Stakeholder engagement (p52)	
<b>G4-25</b>	Report the basis for identification and selection of stakeholders with whom to engage	Stakeholder engagement (p52)	
<b>G4-26</b>	Report the organisation's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	Stakeholder engagement (p52)	
<b>G4-27</b>	Report key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns	Stakeholder engagement (p52)	
<b>REPORT PROFILE</b>			
<b>G4-28</b>	Reporting period (such as fiscal or calendar year) for information provided	About this report (p2)	
<b>G4-29</b>	Date of most recent previous report (if any)	About this report (p2)	
<b>G4-30</b>	Reporting cycle (such as annual, biennial)	About this report (p2)	
<b>G4-31</b>	Provide the contact point for questions regarding the report or its contents	Directorate and administration (Inside back cover)	
<b>G4-32</b>	"In accordance" option: a. Report the 'in accordance' option the organisation has chosen. b. Report the GRI Content Index for the chosen option. c. Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines	Assurance report (p204) Global Reporting Initiative Index (p210)	
<b>G4-33</b>	a. Report the organisation's policy and current practice with regard to seeking external assurance for the report. b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. c. Report the relationship between the organisation and the assurance providers. d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organisation's sustainability report	Social and ethics committee chairman's report (p22) Assurance report (p204)	
<b>GOVERNANCE</b>			
<b>G4-34</b>	Report the governance structure of the organisation, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts	Board and management (p28)	
<b>ETHICS AND INTEGRITY</b>			
<b>G4-56</b>	Describe the organisation's values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics	Our values (inside front cover), Who Harmony is (p4) Our strategy and investment case (p25) Corporate governance (p172)	

<b>SPECIFIC STANDARD DISCLOSURES</b>				
<b>Disclosures on Management Approach and Indicators</b>		<b>Section reference</b>	<b>Identified omissions and reasons</b>	<b>External assurance</b>
<b>CATEGORY: ECONOMIC</b>				
<b>MATERIAL ASPECT: ECONOMIC PERFORMANCE</b>				
<b>G4-EC1</b>	Economic value generated and distributed	How we performed (p8) How we create value (p26) Financial director's review (p18)	No omissions	
<b>G4-EC2</b>	Financial implications and other risks and opportunities for the organisation's activities due to climate change	Environmental performance: Addressing climate change by optimising our energy usage (p106)	No omissions	
<b>G4-EC4</b>	Financial assistance received from government	How we create value (p26) Financial director's review (p18)	Not applicable Do not receive assistance from government	
<b>MATERIAL ASPECT: MARKET PRESENCE</b>				
<b>G4-EC5</b>	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	Our business context (p38)	Not applicable	
<b>G4-EC6</b>	Proportion of senior management hired from the local community at significant locations of operation	Employees and communities: Employment equity (p85)	Not applicable	
<b>MATERIAL ASPECT: INDIRECT ECONOMIC IMPACTS</b>				
<b>G4-EC7</b>	Development and impact of infrastructure investments and services supported	Operational performance: Outlook for FY16 (p123)	Not applicable	
<b>G4-EC8</b>	Significant indirect economic impacts, including the extent of impacts	Operational performance: Outlook for FY16 (p123)	Not applicable	
<b>MATERIAL ASPECT: PROCUREMENT PRACTICES</b>				
<b>G4-EC9</b>	Proportion of spending on local suppliers at significant locations of operation	Employees and communities: Procurement (p98)	Not applicable	Assurance on preferential procurement – BEE total spend (ZAR) Assurance report
<b>CATEGORY: ENVIRONMENTAL</b>				
<b>MATERIAL ASPECT: MATERIALS</b>				
<b>G4-EN1</b>	Materials used by weight or volume	Environmental performance: Limiting and optimising the resources we use (p104)	No omissions	
<b>MATERIAL ASPECT: ENERGY</b>				
<b>G4-EN3</b>	Energy consumption within the organisation	Environmental performance: Optimising our energy usage, reducing carbon emissions (p104)	No omissions	Assurance on electricity purchased (kWh) Assurance report
<b>G4-EN5</b>	Energy intensity	Environmental performance: Optimising our energy usage, reducing carbon emissions (p104)	No omissions	
<b>G4-EN6</b>	Reduction of energy consumption	Environmental performance: Optimising our energy usage, reducing carbon emissions (p104)	No omissions	
<b>MATERIAL ASPECT: WATER</b>				
<b>G4-EN8</b>	Total water withdrawal by source	Environmental performance: Optimising water usage, limiting our impacts (p112) Environmental incidents in FY15 (p103)		Assurance on water used for primary activities (kilolitres) Assurance report
<b>G4-EN9</b>	Water sources significantly affected by withdrawal of water	Environmental performance: Optimising water usage, limiting our impacts (p112)		

# GLOBAL REPORTING INITIATIVE INDEX CONTINUED

<b>SPECIFIC STANDARD DISCLOSURES</b> <small>continued</small>				
<b>Disclosures on Management Approach and Indicators</b>		<b>Section reference</b>	<b>Identified omissions and reasons</b>	<b>External assurance</b>
<b>G4-EN10</b>	Percent and total volume of water recycled and reused	Environmental performance: Optimising water usage, limiting our impacts (p112)		
<b>MATERIAL ASPECT: BIODIVERSITY</b>				
<b>G4-EN12</b>	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Environmental performance: Biodiversity, land management and conservation (p114)		
<b>G4-EN14</b>	International Union of Conservation of Nature (IUCN) red listed with habitats affected by operations	Environmental performance: Biodiversity, land management and conservation (p114)		
<b>MM2</b>	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place	Environmental performance: Biodiversity, land management and conservation (p114)		
<b>MATERIAL ASPECT: EMISSIONS</b>				
<b>G4-EN15</b>	Direct greenhouse gas (GHG) emissions (scope 1)	Environmental performance: Climate change and greenhouse gas (GHG) emissions (p110)		Assurance on total scope 1 carbon emissions (tCO <sub>2</sub> e) Assurance report
<b>G4-EN16</b>	Energy indirect greenhouse gas (GHG) emissions (scope 2)	Environmental performance: Climate change and greenhouse gas (GHG) emissions (p110)		Assurance on total scope 2 carbon emissions (tCO <sub>2</sub> e) Assurance report
<b>G4-EN17</b>	Other indirect greenhouse gas (GHG) emissions (scope 3)	Environmental performance: Climate change and greenhouse gas (GHG) emissions (p110)		Assurance on total scope 3 carbon emissions (tCO <sub>2</sub> e) Assurance report
<b>G4-EN18</b>	Greenhouse gas (GHG) emissions intensity	Environmental performance: Climate change and greenhouse gas (GHG) emissions (p110)		
<b>G4-EN19</b>	Reduction of greenhouse gas (GHG) emissions	Environmental performance: Climate change and greenhouse gas (GHG) emissions (p110)		
<b>MM1</b>	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	Environmental performance: Biodiversity, land management and conservation (p114)		
<b>MATERIAL ASPECT: EFFLUENTS AND WASTE</b>				
<b>G4-EN22</b>	Total water discharge by quality and destination	Environmental performance: Managing our effluents and waste (p117)		
<b>G4-EN23</b>	Total weight of waste by type and disposal method	Environmental performance: Managing our effluents and waste (p117)		Assurance on volume of mineral waste disposed (tonnes) Assurance report
<b>G4-EN24</b>	Total number and volume of significant spills	Environmental performance: Managing our effluents and waste, environmental incidents (p117)		

<b>SPECIFIC STANDARD DISCLOSURES</b> <i>continued</i>				
<b>Disclosures on Management Approach and Indicators</b>		<b>Section reference</b>	<b>Identified omissions and reasons</b>	<b>External assurance</b>
<b>MM3</b>	Total amounts of overburden, rock, tailings, and sludges and their associated risks	Environmental performance: Managing our effluents and waste (p117)		
<b>MATERIAL ASPECT: COMPLIANCE</b>				
<b>G4-EN29</b>	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Environmental performance: Environmental incidents (p103)		
<b>MATERIAL ASPECT: SUPPLIER ENVIRONMENTAL ASSESSMENT</b>				
<b>G4-EN32</b>	Percentage of new suppliers that were screened using environmental criteria	Environmental performance: Engagement with suppliers and their environmental impacts (p112)		
<b>G4-EN33</b>	Significant actual and potential negative environmental impacts in the supply chain and actions taken	Environmental performance: Engagement with suppliers and their environmental impacts (p112)		
<b>MATERIAL ASPECT: ENVIRONMENTAL GRIEVANCE MECHANISMS</b>				
<b>G4-EN34</b>	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	Stakeholder engagement: Host communities, labour sending areas and neighbours (p55)  Environmental performance: Environmental incidents (p103)		
<b>CATEGORY: SOCIAL</b>				
<b>LABOR PRACTICES AND DECENT WORK</b>				
<b>MATERIAL ASPECT: EMPLOYMENT</b>				
<b>G4-LA1</b>	Total number and rates of new employee hires and employee turnover by age group, gender and region	Employees and communities, Human rights (p86)  Corporate Governance: Human rights (p181)	Harmony distinguishes between permanent employees and contractors, by operation	
<b>G4-LA2</b>	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	Safety and Health: Health (p65)  Employees and communities: Employment standards (p78)	Not applicable	
<b>MATERIAL ASPECT: OCCUPATIONAL HEALTH AND SAFETY</b>				
<b>G4-LA5</b>	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	Safety and health: Safety performance (p60)	Not applicable	
<b>G4-LA6</b>	Type of injury and rate of injury, occupational disease, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Safety and health (p58)  Operational performance (p120)		Assurance on lost time injury frequency rate (LTIFR), total injuries and accidents (TIA) and silicosis – number of cases confirmed Assurance report
<b>G4-LA7</b>	Workers with incidence or risk of disease related to their occupation	Safety and health (p58)	Not applicable	
<b>G4-LA8</b>	Health and safety topics covered in formal agreements with trade unions	Safety and health (p58)	Not applicable	

# GLOBAL REPORTING INITIATIVE INDEX CONTINUED

<b>SPECIFIC STANDARD DISCLOSURES</b> <small>continued</small>				
<b>Disclosures on Management Approach and Indicators</b>	<b>Section reference</b>	<b>Identified omissions and reasons</b>	<b>External assurance</b>	
<b>MATERIAL ASPECT: TRAINING AND EDUCATION</b>				
<b>G4-LA9</b>	Average hours of training per year per employee by gender, and by employee category	Employees and communities (p76)	Harmony can now breakdown training hours	Assurance on critical skills training – number of people trained Assurance report
<b>G4-LA10</b>	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Employees and communities: Adult education and training (p81)	Transition assistance programmes implemented and assistance provided to facilitate continued employability and management of career endings	
<b>G4-LA11</b>	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Employees and communities (p76)	Not applicable	
<b>MATERIAL ASPECT: DIVERSITY AND EQUAL OPPORTUNITY</b>				
<b>G4-LA12</b>	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Employees and communities (p76)	Harmony only quantifies the split between own employees and contractors in compliance with the Employment Equity Act and Mining Charter targets. However, diversity indicators are closely monitored against targets by the social and ethics committee of the board.	Assurance on employment equity in management in South Africa see Assurance report
<b>MATERIAL ASPECT: SUPPLIER ASSESSMENT FOR LABOR PRACTICES</b>				
<b>G4-LA14</b>	Percentage of new suppliers that were screened using labour practices criteria	Employees and communities: Human rights (p86)  Corporate governance: Human rights (p181)	Not applicable	
<b>G4-LA15</b>	Significant actual and potential negative impacts for labour practices in the supply chain and actions taken	Employees and communities: Procurement (p98)	Not applicable	
<b>MATERIAL ASPECT: LABOR PRACTICES GRIEVANCE MECHANISMS</b>				
<b>G4-LA16</b>	Number of grievances about labour practices filed, addressed, and resolved through formal grievance mechanisms	Employees and communities: Labour disputes and strikes (p79)		
<b>MM4</b>	Number of strikes and lock-outs exceeding one week's duration, by country	Employees and communities: Labour disputes and strikes (p78)		

<b>SPECIFIC STANDARD DISCLOSURES</b> <i>continued</i>				
<b>Disclosures on Management Approach and Indicators</b>		<b>Section reference</b>	<b>Identified omissions and reasons</b>	<b>External assurance</b>
<b>HUMAN RIGHTS</b>				
<b>MATERIAL ASPECT: INVESTMENT</b>				
<b>G4-HR1</b>	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Employees and communities: Human rights (p86)  Corporate governance: Human rights (p181)	Not applicable	
<b>MATERIAL ASPECT: NON-DISCRIMINATION</b>				
<b>G4-HR3</b>	Total number of incidents of discrimination and corrective actions taken	Employees and communities: Employment equity (p85)  Corporate governance: Human rights (p181)	Not applicable	
<b>MATERIAL ASPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING</b>				
<b>G4-HR4</b>	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	Employees and communities: Freedom of association (p80)	Not applicable	
<b>MATERIAL ASPECT: INDIGENOUS RIGHTS</b>				
<b>MM5</b>	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities	Employees and communities: Human rights (p86)  This only applies to our Papua New Guinea operations at present, where we comply with local legislation, licence conditions and agreements with associated communities and landowners	Not applicable	
<b>MATERIAL ASPECT: ASSESSMENT</b>				
<b>G4-HR9</b>	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	Corporate governance: Human rights (p181)	Not applicable	
<b>MATERIAL ASPECT: SUPPLIER HUMAN RIGHTS ASSESSMENT</b>				
<b>G4-HR10</b>	Percentage of new suppliers that were screened using human rights criteria	Corporate governance: Human rights (p181)	Not applicable	
<b>G4-HR11</b>	Significant actual and potential negative human rights impacts in the supply chain and actions taken	Employees and communities: Labour disputes and strikes (p79) Human rights (p86)  Environmental performance: Engagement with suppliers and their environmental impacts (p112)	Not applicable	

# GLOBAL REPORTING INITIATIVE INDEX CONTINUED

<b>SPECIFIC STANDARD DISCLOSURES</b> <small>continued</small>			
<b>Disclosures on Management Approach and Indicators</b>	<b>Section reference</b>	<b>Identified omissions and reasons</b>	<b>External assurance</b>
<b>MATERIAL ASPECT: HUMAN RIGHTS GRIEVANCE MECHANISMS</b>			
<b>G4-HR12</b>	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	Corporate governance: Human rights (p181)	Not applicable
<b>SOCIETY</b>			
<b>MATERIAL ASPECT: LOCAL COMMUNITIES</b>			
<b>G4-SO1</b>	Percentage of operations with implemented local community engagement, impact assessments, and development programmes	Employees and communities (p76)	Not applicable
<b>G4-SO2</b>	Operations with significant actual or potential negative impacts on local communities	Operational performance: Socio-economic investment (p94)	Not applicable
<b>MM6</b>	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples	There were no disputes during the year under review.	
<b>MATERIAL ASPECT: ANTI-CORRUPTION</b>			
<b>G4-SO3</b>	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Corporate governance: Human rights (p181)	Not applicable
<b>G4-SO4</b>	Communication and training on anti-corruption policies and procedures	Corporate governance: Human rights (p181)	Not applicable
<b>G4-SO5</b>	Confirmed incidents of corruption and actions taken	Corporate governance: Code of ethics (p180)	Not applicable
<b>MATERIAL ASPECT: PUBLIC POLICY</b>			
<b>G4-SO6</b>	Total value of political contributions by country and recipient/beneficiary	Corporate governance: Political donations (p181)	Not applicable
<b>MATERIAL ASPECT: ANTI-COMPETITIVE BEHAVIOR</b>			
<b>G4-SO7</b>	Total number of legal actions for anti-competitive behaviour, anti-trust, and monopoly practices and their outcomes	Corporate governance: Legislative compliance (p179)	Not applicable
<b>MATERIAL ASPECT: COMPLIANCE</b>			
<b>G4-SO8</b>	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Environmental performance: Environmental incidents in FY15 (p112)  Corporate governance: Legislative compliance (p179)	Not applicable
<b>MATERIAL ASPECT: SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY</b>			
<b>G4-SO10</b>	Significant actual and potential negative impacts on society in the supply chain and actions taken	Employees and communities: Procurement (p98)	Not applicable

# ADDITIONAL INFORMATION

## ADDITIONAL INFORMATION

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<i>*inside back cover</i>	



# SHAREHOLDER INFORMATION

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## STOCK EXCHANGE LISTINGS AND TICKER CODES

Harmony's primary listing is on the JSE Limited. It is also quoted in the form of American depositary receipts on the New York Stock Exchange and as international depositary receipts on the Berlin exchange.

### Harmony's ticker codes on these exchanges are as follows:

JSE Limited	HAR
New York Stock Exchange Euronext	HMY
Berlin Stock Exchange	HAM1

## SHARE INFORMATION

Sector	Resources
Sub-sector	Gold
Nature of business	Harmony Gold Mining Company Limited and its subsidiaries are engaged in underground and open-pit gold mining, exploration and related activities in South Africa and Papua New Guinea.
Issued share capital as at 30 June 2015	436 187 133 shares in issue
Market capitalisation	
at 30 June 2015	R6.8 billion or US\$560 million
at 30 June 2014	R13.58 billion or US\$1.28 billion
Share price statistics – FY15	
Johannesburg Stock Exchange: 12 month high	R35.50
12 month low	R15.59
Closing price as at 30 June 2015	R15.59
New York Stock Exchange: 12 month high	US\$3.29
12 month low	US\$1.31
Closing price as at 30 June 2015	US\$1.34
Free float	100%
ADR ratio	1:1

## SHAREHOLDER SPREAD AS AT 30 JUNE 2015

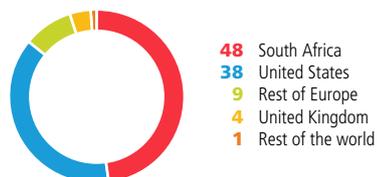
Shareholder spread	Number of shareholders	% of shareholders	Number of shares	% of issued share capital
Public	8 693	99.89	251 177 613	57.59
Non-public	10	0.11	185 009 520	42.41
Share option scheme	3	0.03	1 087 401	0.25
Holding 10% +	3	0.03	183 569 759	42.09
Directors*	5	0.05	352 360	0.08
<b>Totals</b>	<b>8 703</b>	<b>100.00</b>	<b>436 187 133</b>	<b>100.00</b>

\* Held by Frank Abbott, Graham Briggs, Ken Dicks, Mashego Mashego and André Wilkens

## GEOGRAPHIC DISTRIBUTION OF SHAREHOLDERS AS AT 30 JUNE 2015

### Geographic distribution of shareholders (%)

as at 30 June 2015



### Ownership summary as at 30 June 2015

Rank	Investor	Current combined position	% shares in issue
1	Allan Gray Unit Trust Management Ltd.	64 690 738	14.83
2	African Rainbow Minerals Ltd	63 632 922	14.59
3	Van Eck Global	55 246 099	12.67
4	Public Investment Corp. of South Africa	31 174 528	7.15
5	Retail Brokers (ADR)	22 121 076	5.07
6	Dimensional Fund Advisors, Inc.	13 487 290	3.09
7	Domestic Broker Dealers	11 786 747	2.70
8	The Vanguard Group, Inc.	10 850 897	2.49
9	Universal-Investment GmbH	9 668 294	2.22
10	Renaissance Technologies LLC	6 068 100	1.39

### DIVIDEND POLICY

In considering the payment of dividends, the board will, with the assistance of the audit and risk and investment committees, take into account the following:

- The current financial status of the company and the payment of a proposed dividend subject to the successful application of the solvency and liquidity test as set out in section 4 of the Companies Act of 2008
- The future funding and capital requirements of the company
- The intention to pay a dividend

### DIVIDEND PAID DURING FY15

No dividends were declared during FY15. Harmony's stated policy is to only pay dividends from profits and not from debt.

### SHAREHOLDERS' DIARY

Financial year-end	30 June
Annual financial statements issued	23 October 2015
Form 20-F issued	23 October 2015
Annual general meeting	23 November 2015
<b>Quarterly results presentations FY16:</b>	
Quarter 1	5 November 2015
Quarter 2	4 February 2016
Quarter 3	9 May 2016
Quarter 4	17 August 2016

# GLOSSARY OF TERMS

Term	Definition
AET	Adult education and training
ADR	American depository receipts
Ag	Silver
AMCU	Association of Mineworkers and Construction Union
AMD	Acid mine drainage – outflow of acidic water formed by mining activity and egress of water following contact with certain types of ore bodies and host rock. Also known as acid rock drainage
ART	Antiretroviral therapy
Au	Gold
BEE	Black economic empowerment
BBBEE	Broad-based black economic empowerment
By-products	Any products emanating from the core process of producing gold, including silver and uranium in South Africa and copper, silver and molybdenum in Papua New Guinea
Capital expenditure (capex)	Expenditure on tangible assets – includes on-going and project capital. In particular, capex includes spending on on-going development, abnormal expenditure, shaft projects and major projects, and covers both sustaining and growing operations
Carbon-in-leach (CIL)	Gold is leached from a slurry of gold ore with cyanide in agitated tanks and adsorbed on to carbon granules in the same circuit. Granules are separated from the slurry and treated to remove gold
Carbon-in-pulp (CIP)	Gold is leached conventionally from a slurry of gold ore with cyanide in agitated tanks. The leached slurry passes into the CIP circuit where carbon granules are mixed with the slurry and gold is adsorbed onto the carbon. Granules are separated from the slurry and treated to remove gold
Cash costs	Total cash costs include site costs for all mining, processing and administration, reduced by contributions from by-products and include royalties and production taxes. Depreciation, rehabilitation, corporate administration, retrenchment, capital and exploration costs are excluded. Total cash costs per ounce are attributable total cash costs divided by attributable ounces of gold produced
CDP	Carbon Disclosure Project – an independent not-for-profit organisation that acts as an intermediary between shareholders and corporations on all climate change-related issues, providing primary climate change data from the world's largest corporations to the global marketplace
CEO	Chief executive officer
CO <sub>2</sub> emissions	Total CO <sub>2</sub> emissions calculated from direct emissions generated from petrol and diesel consumption and indirect emissions generated from electricity consumption (expressed in tonnes)
<sup>1</sup> Critical skills training – number of people trained in FY15	<p>The following disciplines are defined as core skills:</p> <ul style="list-style-type: none"> <li>• Mining</li> <li>• Engineering</li> <li>• Ore reserves</li> <li>• Metallurgy</li> </ul> <p>The critical skills within these disciplines are:</p> <ul style="list-style-type: none"> <li>• Mining – general manager; mine manager; mining manager</li> <li>• Engineering – engineers; junior engineers</li> <li>• Ore reserves – ore reserve management; HOD – geology, survey and planning; section geologist/senior geologist; section surveyor/mine surveyor/senior shaft surveyor; section geostatistician/senior geostatistician (geological technician); section planner/senior planner; surveyors/geotechs</li> <li>• Metallurgy – plant manager; senior metallurgist</li> </ul>
CSI/R	Corporate social investment/responsibility

<sup>1</sup> Definitions applied to the Selected Sustainability Indicators assured by the independent auditors

Term	Definition
Cu	Copper
Cut-off grade	Minimum grade at which a unit of ore will be mined to achieve the desired economic outcome
Cyanide Code	International management code for manufacture, transport and use of cyanide in producing gold. The aim is to promote responsible management of cyanide used in gold mining; to protect human health and reduce potential for environmental impacts
Depletion	Decrease in quantity of ore in a deposit or property due to extraction or production
Development	Process of accessing an ore body through shafts or tunnelling in underground mining
Discontinued operation	A component of an entity that has been disposed of or abandoned or classified as held for sale until conditions precedent to the sale have been fulfilled
DMR	Department of Mineral Resources, South Africa
DOTS	Directly observed therapy short-course
DSM	Demand-side management
DTI	Department of Trade and Industry
EBIT	Earnings before interest and tax
<sup>1</sup> Electricity purchased (kWh)	Electricity purchased from the supplier during the reporting period. This includes all electricity purchased by source (fossil fuel, nuclear, hydroelectric, wind, solar, etc). It excludes electricity generated by the operation itself and electricity supplied to third parties such as mine hostels/accommodation where cost is recovered from employees, communities and businesses
EMP/S	Environmental management programme/system
EMPR	Environmental management programme report
Employment equity in management in South Africa (%)	<p>Employment equity is reported as a number and percentage of the total number of historically disadvantaged South Africans employed per band.</p> <p>For historically disadvantaged South Africans we refer to: black people (African, coloured and Indian males and females) and white women. White males and foreigners (including those naturalised after the DTI code date on March 1994) are excluded</p> <p>Employment equity is measured in the bands C, D, E and F, where:</p> <ul style="list-style-type: none"> <li>• Top management (F band)</li> <li>• Senior management (E band)</li> <li>• Professionally qualified and experienced specialists/middle management (D band)</li> <li>• Skilled technical and academic qualified/junior management/supervisors/foremen/superintendents (C band)</li> <li>• Core and critical (C-E management levels in core disciplines)</li> </ul>
Energy consumption	Energy use calculated from electricity purchased and diesel and petrol consumed during the reporting period
ERP	Enterprise resource planning
ESOP	Employee share ownership scheme
ETFs	Exchange traded funds
Exco	Executive committee

<sup>1</sup> Definitions applied to the Selected Sustainability Indicators assured by the independent auditors

# GLOSSARY OF TERMS CONTINUED

Term	Definition
FIFR	Fatal injury frequency rate A work-related injury which results in loss of life The calculation for the fatality injury frequency rate (FIFR): Actual fatal injuries x 1 000 000/hours worked The calculation for hours: Actual shifts worked x 9 (this is throughout Harmony for consistency to assume every person works nine hours per shift)
FOG	Fall of ground
FOGIFR	Fall-of-ground injury frequency rate Any work-related fall-of-ground injury that calls for medication, treatment, medical checks and reviews, irrespective of time lost or not The calculation for FOGIFR: Actual fall of ground injuries x 1 000 000/hours worked The calculation for hours: Actual shifts worked x 9 (this is throughout Harmony for consistency to assume every person works nine hours)
FSC	Forest Stewardship Council
g/TEC	Grams per total employee costed
GHG	Greenhouse gas – a gas that contributes to the greenhouse effect by absorbing infrared radiation, such as carbon dioxide and chlorofluorocarbons (CFCs)
Gold produced	Refined gold derived from the mining process, measured in ounces or kilograms in saleable form
Grade	Quantity of gold contained in a unit weight of gold-bearing material, generally expressed in ounces per short ton of ore (oz/t), or grams per metric tonne (g/t)
GRI	Global Reporting Initiative
GWh	Gigawatt hours
HDSAs	Historically disadvantaged South Africans – all people and groups discriminated against on the basis of race, gender and disability as per the Mineral and Petroleum Resources Development Act (No 28 of 2002) and the Mining Charter definitions
HIV	Human immunodeficiency virus
HIV/Aids	Human immunodeficiency virus or acquired immunodeficiency syndrome
Housing and living conditions:	
1 a) conversion of operational hostels from sharing to single occupancy rooms	The number of employees who share a room in Harmony's company accommodation at active mining operations, and the number of employees who have single rooms in Harmony's company accommodation at active mining operations. This is calculated by comparing the total physical hostel design capacity (room numbers) versus the total number of hostel occupants. This gives the total average occupancy rate per hostel. An average of greater than one person for an active mining operation confirms that the occupant is sharing accommodation
b) Conversion of non-operational hostels from single-sex units to family units known as community rental units (CRU)	The number of family units is determined by the architectural design of the new structure, designed to create community rental units for both Harmony employees and members of the public
c) Promoting home ownership	Company houses sold to individual employees at special prices and other housing development initiatives being promoted or facilitated by Harmony

<sup>1</sup> Definitions applied to the Selected Sustainability Indicators assured by the independent auditors

Term	Definition
HR	Human resources
ICMM	International Council on Mining and Metals
ICT/IT	Information and communication technology/information technology
IFRS	International Financial Reporting Standards
IIRC	International Integrated Reporting Council
Indicated mineral resource	Part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information using appropriate techniques from outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but close enough for continuity to be assumed
Inferred mineral resource	Part of a mineral resource for which tonnage, grade resource and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from outcrops, trenches, pits, workings and drill holes that may be limited or of uncertain quality and reliability
Interest cover	Earnings before interest and tax divided by finance costs and unwinding of obligations
IRCA	International Register of Certificated Auditors
ISO	International Organisation for Standardization
ISO 9000	International Standards Organization's family of standards for quality management systems
ISO 9001	The only standard within the ISO 9000 family against which a company can be certified against. It is the standard that defines the requirements of having a Quality Management System
ISO 14001	Published in 1996 by the International Organisation for Environmental Standardisation, it specifies actual requirements for an environmental management system
ISO 50001	This standard specifies the requirements for establishing, implementing, maintaining and improving an energy management system so as to achieve continually improving energy performance, including energy efficiency, energy use and consumption
IUCN	International Union for Conservation of Nature and Natural Resources
JMS	Joint Metallurgical Services
JORC	Australian Code for Reporting Exploration Results, Mineral Resources and Mineral Reserves
JSE	JSE Limited (Johannesburg Stock Exchange)
Kina	Papua New Guinea currency
King III	King Report on Governance for South Africa, published in 2009
kg	Kilograms
KPIs	Key performance indicators
Land disturbed and land available for rehabilitation (ha)	Total land footprint disturbed less the land footprint used for on-going or future mining activities, where the footprint of disturbed area includes all buildings, roads and mining area that needs to be rehabilitated according to the Environmental Management Programme Report (EMPR); the area rehabilitated meets the required standard of the EMPR, final land use plans and only maintenance and monitoring is needed; and the land available for rehabilitation is the area used for on-going or future mining activities
LED	Local economic development

<sup>1</sup> Definitions applied to the Selected Sustainability Indicators assured by the independent auditors

# GLOSSARY OF TERMS CONTINUED

Term	Definition
<sup>1</sup> Local economic development (LED) spend/ community spend (South African rands)	<p>Local economic development project spend linked to the licence of each mine.</p> <p>The following categories qualify as LED spend:</p> <ul style="list-style-type: none"> <li>• bursary students</li> <li>• bursary graduates</li> <li>• training bridging school</li> <li>• training mining</li> <li>• training engineering</li> <li>• costs related to: <ul style="list-style-type: none"> <li>• mine community projects</li> <li>• labour-sending area; projects in community that is not for mine employees; and</li> <li>• conversion of hostel into family units</li> </ul> </li> <li>• Procurement spend related to: <ul style="list-style-type: none"> <li>• contractor compliance; and</li> <li>• BEE procurement</li> </ul> </li> <li>• corporate social responsibility</li> </ul>
LOM	Life of mine: the number of years an operation is scheduled to mine and treat ore, based on the current mine plan
LPG	Liquefied petroleum gas
<sup>1</sup> LTIFR	<p>Lost-time injury frequency rate: a lost-time injury is a work-related injury that calls for medication, treatment, medical checks, reviews and subsequent days off work. This injury or illness incapacitates injured employees from performing their normal occupation on the next scheduled work day or shift.</p> <p>The calculation for the lost-time injury frequency rate (LTIFR): Actual lost-time injuries x 1 000 000/hours worked</p> <p>The calculation for hours: Actual shifts worked x 9 (this is throughout Harmony for consistency to assume every person works nine hours)</p>
m <sup>2</sup> /TEC	Square metres per total employee costed
MBoD	Medical Bureau of Occupational Diseases
MDR TB	Multidrug-resistant tuberculosis
Measured mineral resource	Part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from outcrops, trenches, pits, workings and drill holes. Locations are spaced closely enough to confirm geological and grade continuity
MHSC	Mine Health and Safety Council
MHSA	Mine Health and Safety Act (No 29 of 1996)
Mine call factor	The ratio, expressed as a percentage, of the total quantity of recovered and unrecovered mineral product after processing with the amount estimated in the ore based on sampling
Mineral resource	A concentration or occurrence of material of intrinsic economic interest in/on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral resources are subdivided, in order of increasing geological confidence, into inferred, indicated and measured categories

<sup>1</sup> Definitions applied to the Selected Sustainability Indicators assured by the independent auditors

Term	Definition
Mining Charter	Broad-based social-economic empowerment charter for the South African mining industry. The goal is to create an industry that reflects the promise of a non-racial South Africa
MMJV	Morobe Mining Joint Ventures
Mo	Molybdenum
MOSH	Mining Industry Occupational Safety and Health
Moz	Million ounces
MPRDA	Mineral and Petroleum Resources Development Act (No 28 of 2002)
MQA	Mining Qualifications Authority, a sector education training authority for the mining and minerals sector facilitating human resources development
MW	Megawatt
MWh	Megawatt hour
NEMA	National Environmental Management Act
NERSA	National Energy Regulator of South Africa
NGO	Non-governmental organisation
NIHL	Noise-induced hearing loss reported as the number of new cases identified and submitted for compensation during the reporting period
NNR	National Nuclear Regulator
NQF	National Qualifications Framework
NUM	National Union of Mineworkers
NWA	National Water Act
NYSE	New York Stock Exchange
OHSAS 18001	Occupational health and safety assessment specification
On-going capital	Capital expenditure to maintain existing production assets. This includes replacement of vehicles, plant and machinery, ore reserve development and capital expenditure related to safety, health and the environment
Operating margin	Revenue less production costs expressed as a percentage of revenue
Pay limit	The grade of a unit of ore at which revenue from the recovered mineral content of the ore is equal to the total cash cost, including ore reserve development and stay-in-business capital. This grade is expressed as an in-situ value in grams per tonne or ounces per short ton (before dilution and mineral losses)
PNG	Papua New Guinea
<sup>1</sup> Preferential procurement – BEE total spend (ZAR)	Procurement spend collected from the Harmony enterprise resource planning system's payment register, which is only the discretionary spend value spent with suppliers that hold a valid black economic empowerment certificate, and comply with the minimum historically disadvantaged South Africans ownership of 25%, or more. The reporting period for this key performance indicator is 26 June 2014 to 25 June 2015, and reports the spend throughout the reporting period regardless of invoice date. Reporting is aligned with the requirement of the revised Mining Charter of September 2010

<sup>1</sup> Definitions applied to the Selected Sustainability Indicators assured by the independent auditors

## GLOSSARY OF TERMS CONTINUED

Term	Definition
Probable mineral reserve	Economically mineable part of an indicated, and in some cases, a measured mineral resource. It includes diluting materials and allowances for losses that may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified
Productivity	An expression of labour productivity based on the ratio of grams of gold produced per month to the total number of employees in underground mining operations
Project capital	Capital expenditure to either bring a new operation into production; to materially increase production capacity; or to materially extend the productive life of an asset
Proved reserve	Economically mineable part of a measured mineral resource. It includes diluting materials and allowances for losses that may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified
Reclamation	In South Africa, reclamation describes the process of reclaiming slimes (tailings) dumps using high-pressure water cannons to form a slurry that is pumped back to metallurgical plants for processing
Reef	A gold-bearing sedimentary horizon, normally a conglomerate band that may contain economic levels of gold
REFIT	Renewable energy feed-in tariff
SAMREC	South African Code for Reporting Exploration Results, Mineral Resources and Mineral Reserves
SANS	South African national standard
<sup>1</sup> Scope 1 carbon emissions (tCO <sub>2</sub> e)	Direct combustion of fuel by the Harmony Group (explosives, diesel and petrol)
<sup>1</sup> Scope 2 carbon emissions (tCO <sub>2</sub> e)	Scope 2 emissions calculated from electricity purchased (from the power utility excluding use by third parties) multiplied by the appropriate factor as indicated by the electricity supplier
<sup>1</sup> Scope 3 carbon emissions (tCO <sub>2</sub> e)	Indirect combustion by the Harmony group in line with Scope 3 emissions in the following categories, as indicated by the greenhouse gas Protocol: <ul style="list-style-type: none"> <li>• Purchased goods and services</li> <li>• Capital goods</li> <li>• Fuel and Energy related emissions not included in Scopes 1 and 2</li> <li>• Upstream transportation and distribution</li> <li>• Waste generated in operations</li> <li>• Business travel</li> <li>• Employee commuting</li> <li>• Upstream leased assets</li> <li>• Downstream transportation and distribution</li> <li>• Processing of sold products</li> <li>• Use of sold products</li> <li>• Downstream leased assets</li> <li>• Franchises</li> <li>• End of life treatment and</li> <li>• Investments</li> </ul>

<sup>1</sup> Definitions applied to the Selected Sustainability Indicators assured by the independent auditors

Term	Definition
<sup>1</sup> Silicosis – number of new cases certified in FY15	The number of cases of pure silicosis confirmed by the Medical Bureau of Occupational Diseases in FY15, which includes all cases that have been received by Harmony as confirmed during FY15, regardless of the date of the Medical Bureau of Occupational Diseases letter. Cases where other conditions are present, specifically tuberculosis, are not included in this number
SLPs	Social and labour plans aimed at promoting employment and advancing the social and economic welfare of all South Africans while ensuring economic growth and socio-economic development as stipulated in the MPRDA
SMMEs	Small, medium and micro enterprises
SOX	Sarbanes-Oxley
Tailings	Finely ground rock of low residual value from which valuable minerals have been extracted. Discarded tailings stored in dam facilities
<sup>1</sup> Total injuries and accidents (TIA)	All work-related injuries. This category is the sum of all dressing cases and lost-time injuries.  Dressing cases: a work-related injury that calls for medication, treatment or medical check that is normally administered by a healthcare professional. A dressing case does not result in lost-time from work beyond the date of injury
Tuberculosis – number of cases confirmed in FY15	Tuberculosis (TB). The number of cases of pure tuberculosis confirmed by the Medical Bureau of Occupational Diseases in FY15, which includes all cases that have been received by Harmony as confirmed during FY13, regardless of the date of the Medical Bureau of Occupational Diseases letter. Cases where other conditions are present, specifically silicosis, are not included in this number
Tonne/ton (t)	Metric = 1 000 kilograms / Imperial = 2 000 pounds (1 016 kilograms)
TSF	Tailings storage facility
UASA	United Association of South Africa
US	United States
U <sub>3</sub> O <sub>8</sub>	Uranium oxide
US\$	United States dollar
<sup>1</sup> Volumes of mineral waste disposed (tonnes)	Mineral waste consists of waste rock and slimes/tailings. Waste rock refers to the amount of waste rock produced and/or hoisted to surface, and placed on a waste rock disposal site during the reporting month. Slimes/tailings refers to the total amount of slimes/tailings produced by the processing plant during the reporting month
Waste	Material with insufficient mineralisation for future treatment and discarded
<sup>1</sup> Water used for primary activity (kilolitres)	The total make-up or new water drawn into the boundaries of the operation from all sources (including surface water, groundwater and municipal water supply or water utilities) for use for mining and processing-related activities including use by contractors. This definition excludes: internally recycled water, affected fissure water, water discharged to receiving environment and supply to third parties such as communities and businesses
Weighted average number of ordinary shares	Number of ordinary shares in issue at the beginning of the year, increased by shares issued during the year, weighted on a time basis for the period in which they have participated in the income of the company, and increased by share options that are virtually certain to be exercised
WHO	World Health Organization
Yield	Amount of valuable mineral or metal recovered from each unit mass of ore expressed as ounces per short ton or grams per metric tonne

<sup>1</sup> Definitions applied to the Selected Sustainability Indicators assured by the independent auditors



# FORWARD-LOOKING STATEMENTS

## PRIVATE SECURITIES LITIGATION REFORM ACT

### Safe Harbour Statement

This report contains forward-looking statements within the meaning of the safe harbour provided by Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended, with respect to our financial condition, results of operations, business strategies, operating efficiencies, competitive positions, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters. These include all statements other than statements of historical fact, including, without limitation, any statements preceded by, followed by, or that include the words “targets”, “believes”, “expects”, “aims” “intends” “will”, “may”, “anticipates”, “would”, “should”, “could”, “estimates”, “forecast”, “predict”, “continue” or similar expressions or the negative thereof.

These forward-looking statements, including, among others, those relating to our future business prospects, revenues and income, wherever they may occur in this report and the exhibits to this report, are essentially estimates reflecting the best judgment of our senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. 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, Papua New Guinea, Australia and elsewhere, estimates of future earnings, and the sensitivity of earnings to the gold and other metals prices, estimates of future gold and other metals production and sales, estimates of future cash costs, estimates of future cash flows, and the sensitivity of cash flows to the gold and other metals prices, statements regarding future debt repayments, estimates of future capital expenditures, the success of our business strategy, development activities and other initiatives, estimates of reserves statements regarding future exploration results and the replacement of reserves, the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions, fluctuations in the market price of gold, the occurrence of hazards associated with underground and surface gold mining, the occurrence of labour disruptions, power cost increases as well as power stoppages, fluctuations and usage constraints, supply chain shortages and increases in the prices of production imports, availability, terms and deployment of capital, changes in government regulation, particularly mining rights and environmental regulation, fluctuations in exchange rates, the adequacy of the Group’s insurance coverage and socio-economic or political instability in South Africa, Papua New Guinea and other countries in which we operate.

For a more detailed discussion of such risks and other factors (such as availability of credit or other sources of financing), see the Company’s latest Annual Report on Form 20-F which is on file with the Securities and Exchange Commission, as well as the Company’s other Securities and Exchange Commission filings. The Company 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, except as required by law.

# DIRECTORATE AND ADMINISTRATION

## HARMONY GOLD MINING COMPANY LIMITED

Harmony Gold Mining Company Limited was incorporated and registered as a public company in South Africa on 25 August 1950

Registration number: 1950/038232/06

### Corporate office

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South Africa

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Website: [www.harmony.co.za](http://www.harmony.co.za)

### DIRECTORS

PT Motsepe\* (chairman)  
FFT De Buck\*^ (lead independent director)  
M Motloba\*^ (deputy chairman)  
GP Briggs (chief executive officer)  
F Abbott (financial director)  
JA Chissano\*<sup>1</sup>^  
KV Dicks\*^  
Dr DSS Lushaba\*^  
C Markus\*^  
HE Mashego\*\*  
M Msimang\*^  
KT Nondumo\*^  
VP Pillay\*^  
JL Wetton\*^  
AJ Wilkens\*

\* Non-executive

\*\* Executive

^ Independent

<sup>1</sup> Mozambican

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## TRANSFER SECRETARIES

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PO Box 4844  
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Telephone: +27 86 154 6572  
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## ADR\* DEPOSITORY

### Deutsche Bank Trust Company Americas c/o American Stock Transfer and Trust Company

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New York, NY 10272-2050  
E-mail queries: [db@amstock.com](mailto:db@amstock.com)

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\*ADR: American Depository Receipts

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## TRADING SYMBOLS

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New York Stock Exchange, Inc.: HMY  
Berlin Stock Exchange: HAM1  
ISIN: ZAE 000015228

