

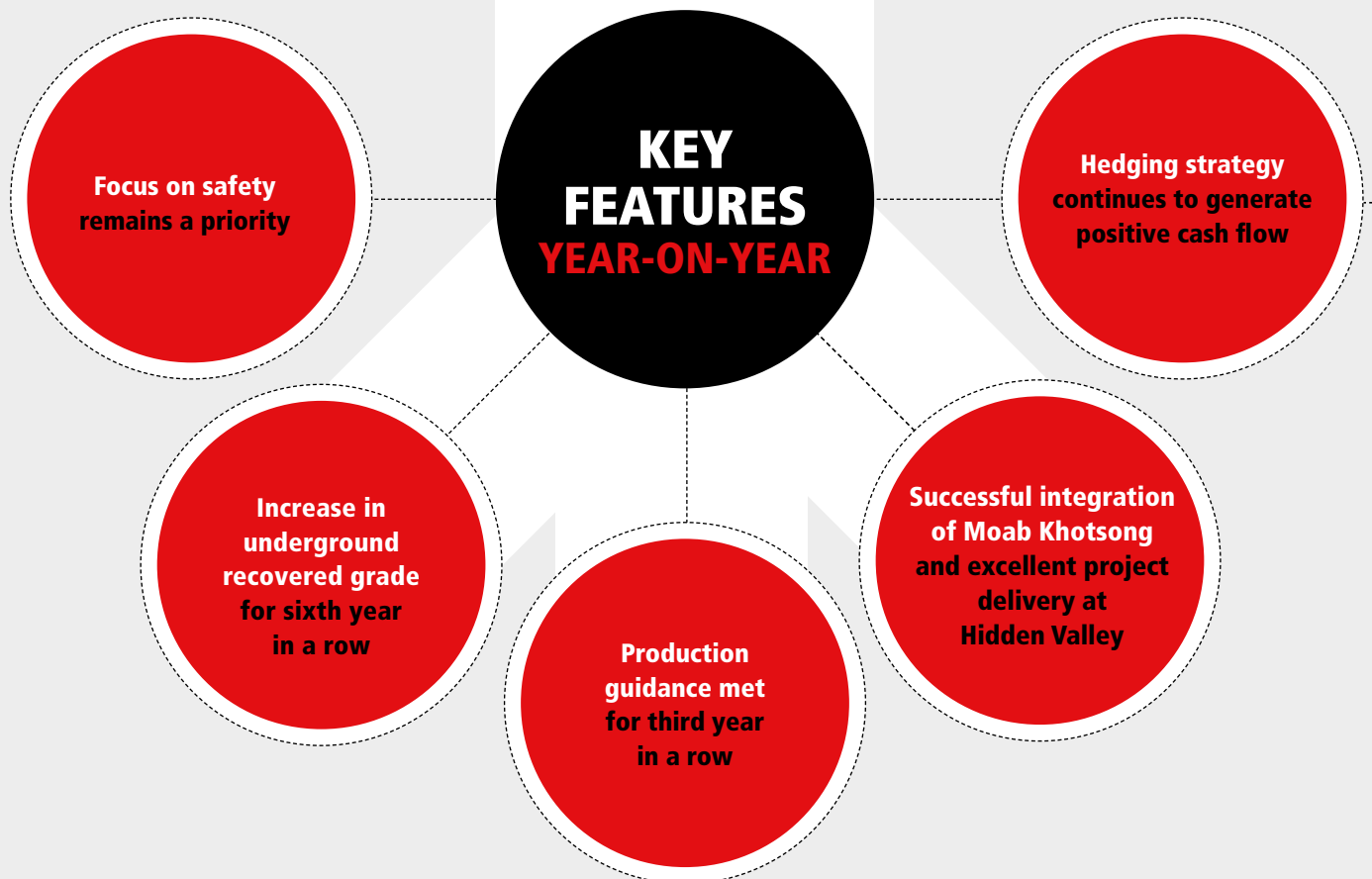


**INTEGRATED
ANNUAL REPORT**

2018

Harmony Gold Mining Company Limited (Harmony), a gold mining and exploration company with 68 years of experience, has operations in South Africa, one of the world's best known gold mining regions, and in Papua New Guinea, a premier new gold-copper region.

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 of the economic contribution that we make to the countries in which we operate.



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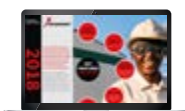
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OUR REPORTS ONLINE

Harmony's full set of 2018 reports and supporting documents are available at www.har.co.za.

The electronic reports are interactive pdfs, with links to sections within the document and to external websites. The interactive links are indicated by text in red italics.



ABOUT THIS REPORT

Our Integrated Annual Report 2018 covers Harmony's performance for the 2018 financial year (FY18), from 1 July 2017 to 30 June 2018. Certain comparative historical information is presented where relevant and to provide insight into our future plans.

In summary, our Integrated Annual Report 2018 encompasses the following elements:



This integrated report has been compiled in line with the International Integrated Reporting Council's Framework, the Global Reporting Initiative (GRI) G4 guidelines and the King Report on Governance for South Africa 2016 (King IV report).

Everything we do in conducting our business, from risk assessment and decision making to reporting, is informed by our values and our understanding of how various elements of the business fit together. We have applied this integrated approach to our reporting – sharing insights into both our financial and non-financial performance. Certain key non-financial performance indicators presented in this report were assured by SNG Grant Thornton. Their Assurance Report is available on page 134.

The mineral resource and reserve information presented was compiled in accordance with the South African Code for Reporting of Exploration Results, Mineral Reserves and Mineral Resources; the Australasian Code for Reporting of Mineral Resources and Mineral Reserves; the 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.

All the reports making up our 2018 suite of reports, together with a Glossary of Terms, defining the terms used in these reports, are available online at www.har.co.za. Any additional information can be found on our website at www.harmony.co.za.

FEEDBACK

We welcome your feedback on these reports. Should you have any comments or suggestions on this report, contact our investor relations team at: HarmonyIR@harmony.co.za

OUR 2018 REPORTS

While this integrated report describes Harmony's performance in delivering on its strategy and creating value for FY18, additional information is presented in the other reports making up the set of 2018 reports:

Integrated Annual Report 2018

Financial Report 2018

Mineral Resources and Mineral Reserves 2018

Report to Shareholders 2018

Form 20-F	Global Reporting Initiative Scorecard	Operations 2018
Annual report filed with the United States Securities and Exchange Commission, in compliance with the listing requirements of the New York Stock Exchange	An index of the indicators reported in terms of the Global Reporting Initiative	Detailed information on each operation

The full set of the 2018 reports and accompanying supplementary documents are available online at www.har.co.za

REFERENCE

A full glossary of terms is available on the website, www.har.co.za. 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 and "Mt" refers to million tonnes. All production volumes are in metric tonnes (t), unless specifically stated as imperial tons.

OUR VALUES

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

The value we create is measured by the impact we have on the lives of stakeholders, now and in the future. To this end, our values inform our decisions and guide all that we do:

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



DIRECTORS' RESPONSIBILITY

for the Integrated Annual Report 2018

Our board of directors has overall accountability for this integrated report. Having reviewed the report, the board, supported by the recommendations of the audit and risk committee and the social and ethics committee, confirmed that this report presents a balanced and representative view of the company and its performance in the past financial year. The board approved this report on 25 October 2018.

Dr Patrice Motsepe
Chairman

Peter Steenkamp
Chief executive officer

Frank Abbott
Financial director

Fikile De Buck
Chairman: Audit and risk committee

Dr Simo Lushaba
Chairman: Social and ethics committee

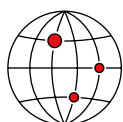
CORPORATE PROFILE



WHO WE ARE

Harmony, a gold mining and exploration company, conducts its activities 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-copper regions. With 68 years of experience, Harmony is South Africa's second largest gold producer.

Headquartered in Randfontein, South Africa, Harmony is listed on the Johannesburg Stock Exchange and on the New York Stock Exchange, on which its shares are quoted as American Depositary Receipts. At 30 June 2018, our market capitalisation was R10.6 billion (US\$769 million) (FY17: R9.5 billion; US\$728 million)



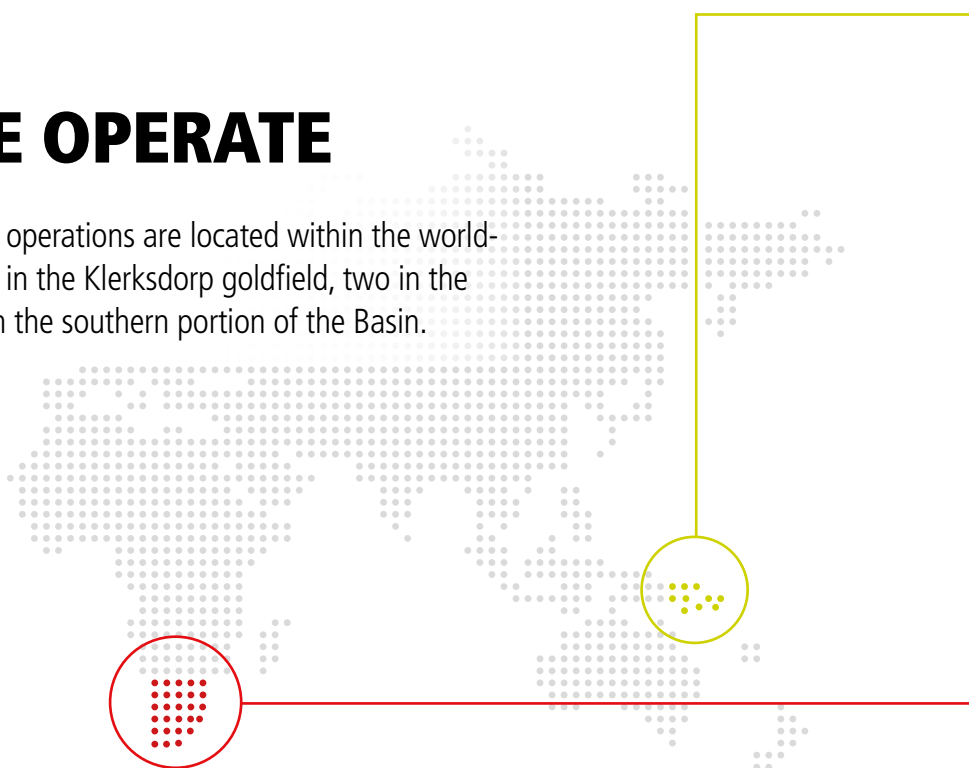
WHERE WE OPERATE

In South Africa, our nine underground operations are located within the world-renowned Witwatersrand Basin – one in the Klerksdorp goldfield, two in the West Rand and six in the Free State, in the southern portion of the Basin.

In addition, we have an open-pit mine on the Kraaipan Greenstone Belt as well as several surface treatment operations.

In Papua New Guinea, Hidden Valley is an open-pit gold and silver mine.

Our significant gold-copper portfolio includes a 50% stake in the Wafi-Golpu project in the Morobe Province, through a 50:50 joint venture with Newcrest Mining Limited (Newcrest).



OPERATING STATISTICS

Gold production increased to

1.23Moz
(FY17: 1.09Moz)

- 13% increase year on year
- Exceeded guidance

Costs contained

**All-in sustaining cost of
R508 970/kg and US\$1 231/oz**
(FY17: R516 687/kg and US\$1 182/oz)

Underground recovered grade improved by

8% to 5.48g/t
(FY17: 5.07g/t)

- Sixth consecutive year of higher grade at South African underground operations

Mineral resources increased 13.0% to

117.8Moz at year-end
(FY17: 104.3Moz)

- Inclusion of Moab Khotsoeng
- Underground resources and reserves for South African operations increased by 31.4% and 11.6% respectively



WHAT WE DO

Exploration and acquisition

Exploring for and evaluating economically viable orebodies and/or value-accretive acquisitions

Mining and processing

Establishing, developing and operating mines and related processing infrastructure. Ore mined is milled and processed by our gold plants to produce gold dore bars

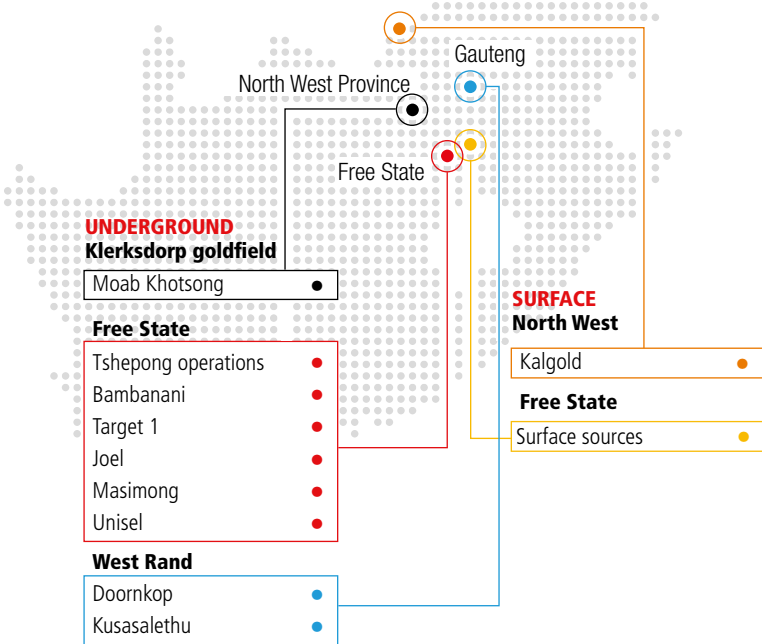
Sales and financial management

Generating revenue through the sale of gold produced and optimising efficiencies to maximise financial returns

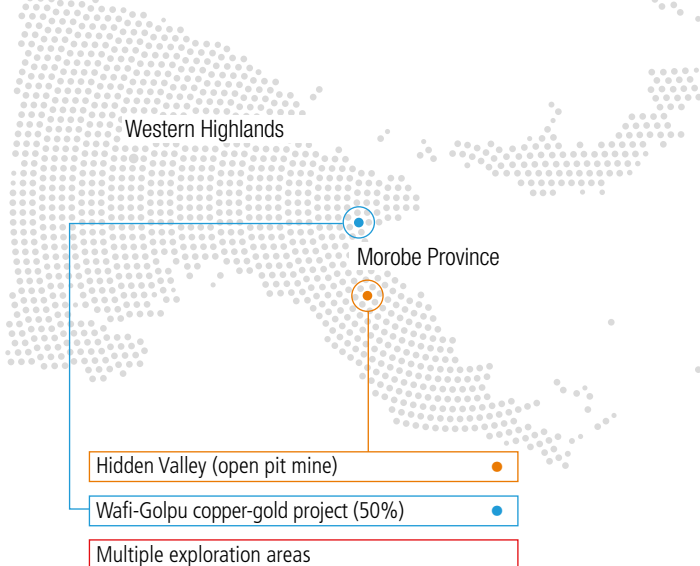
Land rehabilitation and mine closure

Restoring mining impacted land for alternative economic use post-mining and having in place approved mine closure plans

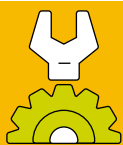
SOUTH AFRICA



PAPUA NEW GUINEA



Harmony's equity interest 100% unless otherwise indicated



EXTERNAL OPERATING CONTEXT

Factors affecting our ability to generate value:

Globally:

- Gold market fundamentals
- Global economic outlook and geo-political climate
- Rand-dollar exchange rate

South Africa:

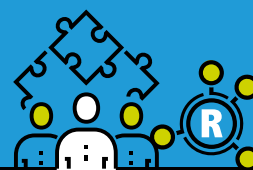
- Regulatory uncertainty
- Industrial relations climate
- Stakeholder expectations

Papua New Guinea:

- Regulatory uncertainty
- Industrial relations climate
- Stakeholder expectations

See *Our business context* for further detail on the external environment in which we operate.

CREATING VALUE – OUR BUSINESS MODEL



As a gold mining and exploration company, the conduct of our business activities to produce gold and its by-products has an impact on stakeholders, including employees, communities and governments, and on the resources used in the process, such as land, water, energy, among others. In addition, financial capital is required to enable us to conduct our activities, which in turn generate cash flow.



Exploration and acquisitions

Establishing a continuing pipeline of resources and reserves is essential to Harmony's long-term sustainability.

Our business activities:

Exploration (greenfield and brownfield)

- **Papua New Guinea:** Greenfield exploration is conducted on the gold-copper porphyry deposits.
- **South Africa:** brownfields exploration on and near our mining operations involves mainly resource definition drilling to increase confidence in our geological modelling. Geological models are updated annually to confirm life-of-mine planning. In all, 62 961m were drilled for reserve development in FY18
- Total exploration expenditure totalled R423 million in FY18
- Involves establishing relationships with relevant stakeholders in new areas of operation, including government, communities and landowners, and managing their expectations

Organic growth prospects

- Wafi-Golpu project – updated feasibility study released in March 2018; approval of special mining licence progressing well
- Tailings retreatment projects in South Africa
- Exploration and drilling at Kalgoold
- Great Noligwa and Zaaipiaats studies

Acquisitions

- Our acquisition strategy is based on acquiring assets that have potential to produce around 100 000oz of gold annually at a unit cost of ~US\$950/oz with a 10-year life of mine
- Moab Khotson, acquired effective 1 March 2018 at a cost of US\$300 million, has begun to make a significant contribution

For more detail on the impact and outcomes of these activities in the past financial year, see *Chief executive officer's review, Exploration and projects*



Mining and processing

Gold-bearing ore is mined at our nine underground, two open pit mining operations and various surface sources in South Africa and Papua New Guinea. To conduct our operations, capital is spent. People are employed and training and development provided to ensure the right skills are available. Infrastructure and equipment must be maintained.

Our operating activities:

- Milled and processed 22.4Mt of ore to produce 1.23Moz of gold
- Employed 40 686 people
- Spent R5.8bn on goods and services
- Consumed 2 548 721MWH of electricity and used 15 473 478m³ of water in primary activities

For more detail on the impact and outcomes of these activities in the past financial year, see *Chief executive officer's review, Safety and health, Employee engagement, Operating performance, Socio-economic development, Environmental management and stewardship*.



Sales and financial management

The end-products of our mining and processing activities are sold to generate revenue which is used in turn to create value for stakeholders and to fund organic growth.

Our financial activities:

- Generated revenue of R20.4 billion, 6% more than the previous year
- Cash of R3.9 billion generated by operating activities, including R1.8 billion generated by the hedging programme
- Following Moab Khotsong acquisition, the Hidden Valley re-investment plan and capital expenditure at our South Africa operations, cash used by investing activities amounted to R8.1 billion
- Market capitalisation improved in both rand and US dollar terms year on year

For more detail on the impact and outcomes of our financial activities in the past financial year, see [Sharing value](#) and [Financial director's report](#).



Environmental stewardship and mine closure

Our environmental stewardship responsibilities include managing the impact of our business activities on the environment. These include land rehabilitation and management, conservation, biodiversity, waste management, pollution, the efficient use of natural resources as well as closure planning, which are all incorporated in the approved environmental management plans in place for each of our operations.

Our environmental activities:

- Spent R199 million on environmental activities
- Generated 3Mt in CO₂ emissions
- Funding/guarantees amounting to R3.7 billion in place to cover rehabilitation and closure

For more detail on the impact and outcomes of our activities on the environment in the past financial year, see [Environmental management and stewardship](#).

GUIDED BY OUR VALUES, GOVERNANCE FRAMEWORK AND CODE OF ETHICS

Harmony is committed to the principles of good corporate governance and ethical conduct. Our governance framework and code of conduct, together with our values, guide all that we do. They underpin our decision-making and inform our interactions with each other and with external stakeholders – shareholders, investors, host communities, especially those from which our employees are drawn, all levels of government, suppliers and the media.

The board, which has a broad range of skills, knowledge and experience, ensures the highest levels of governance are applied. The governance is supported by the legal and compliance function which assesses our risks and material issues, and ensures that the necessary policies, procedures and controls are in place to mitigate them. The audit and risk function monitors the effectiveness of these policies, procedures and controls.

OUR VALUE PROPOSITION

Our business is to unlock and create value by safely, cost effectively and profitably extracting gold from the orebodies we own



Employees

Providing employment and the opportunity to earn a living, to develop skills and learn in a safe working environment



Communities

Sharing value created to stimulate growth and development in host communities by investing in socio-economic projects and promoting preferential local procurement



Government

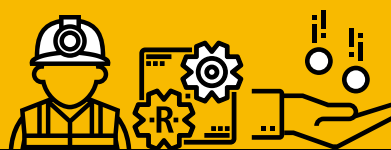
Contributing to the countries in which we operate by paying taxes and royalties



Investors

Delivering consistently higher and sustained financial returns (capital appreciation and dividends)

SHARING VALUE



DISTRIBUTED TO:

EMPLOYEES

39%



WE ENHANCE VALUE BY:

- Creating and maintaining a positive, safe working environment
- Ensuring employee safety a priority with the ultimate aim of zero harm
- Promoting a culture of continuous learning and genuine care
- Investing in employee skills training and development
- Investing in employee housing and accommodation
- Promoting harmonious, co-operative labour relations – with employees and unions
- Promoting transformation and the employment of women in mining
- Attracting and retaining the skills and expertise required

GROWTH

34%*



- Delivering on production and cost guidance
- Generating positive margins and cash flow
- Investing in and delivering organic growth and value-accretive acquisitions
- Ensuring prudent financial gearing
- Ongoing interaction with and reporting to shareholders

SUPPLIERS

24%



- Engaging with suppliers and contractors to establish co-operative, trust-based relationships – a key aspect of cost management
- Ensuring services are delivered as agreed and in line with our values and strategic objectives
- Honest and timely communication with suppliers and contractors

GOVERNMENTS

2%



- Paying taxes and royalties on the profits and earnings generated
- Maintaining positive relationships with regulators
- Ensuring legislative and regulatory compliance

COMMUNITIES

1%



- Investing in local economic development and corporate social investment initiatives
- Engaging with our communities to ensure and maintain positive relationships
- Understanding, managing and addressing communities' expectations
- Making a positive contribution to socio-economic upliftment
- Promoting self-sustaining activities to create jobs and alleviate poverty

By sustaining our business and creating value, as measured by the revenue generated, we are able to share the value created among key stakeholders.

VALUE DISTRIBUTED FY18

In FY18, paid wages and salaries of **R9.5bn** to **40 686** employees (including contractors) (FY17: R9.2bn to 33 201 employees)

For more information, see [Employee engagement](#)

Wages and salaries paid

	South Africa	Papua New Guinea
FY18:	R9.4bn	R132m*
FY17:	R8.4bn	R782m

* Majority of FY18 wages and salaries paid accounted for as capital expenditure as part of the Hidden Valley re-investment

* **Of which 19% was:** In FY18, investment in future value creation and in sustaining the business equated to total capital and exploration expenditure of **R4.7bn** (FY17: R3.0bn)

* **Of which 1% was:** Total dividend paid to shareholders of **R154m (US\$12m)** (FY17: R439m; US\$33m)

* **Of which 14% was:** Acquisition of Moab Khotsong, a high-grade operation, for US\$300m (R3.5bn)

For more information, see [Financial director's report](#)

Investment

	South Africa	Papua New Guinea
FY18:	R6.2bn	R1.9bn
FY17:	R2.4bn	R0.6bn

In South Africa, **80% (R5.1bn)** of total procurement was preferential procurement with black economic empowerment entities

In FY18, Harmony spent **R3.5bn** in total on the procurement of goods and services and **R2.3bn** on electricity (FY17: R3.8bn and R2.2bn respectively)

For more information, see [Socio-economic development](#)

Goods and services

	South Africa	Papua New Guinea
FY18:	R3.2bn	R308m
FY17:	R3.0bn	R848m

Electricity

	South Africa	Papua New Guinea
FY18:	R2.3bn	R11m
FY17:	R2.1bn	R85m

In FY18, Harmony paid taxes and royalties to governments of **R429m** (FY17: R779m).

Also paid income tax of **R1.47bn** on behalf of employees on salaries wages earned (FY17: R1.38bn)

For more information, see [Financial Report 2018](#)

Taxes and royalties

	South Africa	Papua New Guinea
FY18:	R424m	R5m
FY17:	R722m	R57m

Employees' personal income tax

	South Africa	Papua New Guinea
FY18:	R1.26bn	R210m
FY17:	R1.2bn	R179m

In FY18, Harmony contributed **R74m** to economic and social initiatives (FY17: R74m)

For more information, see [Socio-economic development](#)

Socio-economic investment

	South Africa	Papua New Guinea
FY18:	R70m	R4m
FY17:	R71m	R3m

HOW WE PERFORMED – FIVE-YEAR REVIEW

Relevant GRI indicator: G4-EC1

		FY18	FY17	FY16	FY15	FY14
Operating performance						
Ore milled	000t	22 441	19 401	18 373	18 063	18 784
Gold produced ¹	kg	38 193	33 836	33 655	33 513	36 453
	000oz	1 228	1 088	1 082	1 077	1 172
Operating costs	R/kg	421 260	436 917	392 026	369 203	328 931
	US\$/oz	1 018	1 000	841	1 003	988
All-in sustaining costs	R/kg	508 970	516 687	467 611	453 244	406 934
	US\$/oz	1 231	1 182	1 003	1 232	1 223
Underground grade	g/t	5.48	5.07	5.02	4.75	4.77
Financial performance						
Revenue	R million	20 358	19 264	18 334	15 435	15 682
Production costs	R million	15 002	14 812	13 250	12 632	11 888
Production profit	R million	5 356	4 452	5 084	2 803	3 794
Operating margin	%	26	23	28	18	24
Net profit/(loss) for the year	R million	(4 473)	362	949	(4 536)	(1 270)
Total headline earnings/(loss) per share	SA cents	171	298	221	(189)	26
Capital expenditure	R million	4 571	3 890	2 439	2 836	2 661
Exploration spend ^{2,3}	R million	135	241	191	263	458
Dividend paid	R million	154	439	–	–	–
Net debt	R million	(4 908)	(887)	(1 083)	(2 332)	(1 031)
Market performance						
Average gold price received	R/kg	570 709	570 164	544 984	449 570	432 165
	US\$/oz	1 380	1 304	1 169	1 222	1 299
Total market capitalisation	R billion	10.6	9.5	22.9	6.8	13.6
	US\$ billion	0.8	0.7	1.6	0.56	1.3
Average exchange rate	R/US\$	12.85	13.60	14.50	11.45	10.35
Reserves						
Gold and gold equivalents	Moz	36.9	36.7	36.9	42.6	49.5
Geographical distribution of gold reserves						
– South Africa	%	46	44	45	52	57
– Papua New Guinea	%	54	56	55	48	43
Safety						
Number of fatalities		13	5	10	9	22
FIFR – fatal injury frequency rate	per million hours worked	0.16	0.07	0.13	0.11	0.26
LTIFR – lost-time injury frequency rate	per million hours worked	⁵ 6.26	⁴ 7.21	⁴ 6.23	⁴ 9.24	⁴ 7.54
TIA – total injury and accidents	number of incidents	⁵ 654	⁴ 768	⁴ 679	1 210	953
Health (South Africa)						
– Shifts lost due to injury		23 769	24 026	22 416	24 514	25 338
– Silicosis cases certified ⁶		⁵ 179	⁴ 108	⁴ 64	⁴ 197	⁴ 175

¹ Gold production of 2 068kg (66 499oz) capitalised in FY18 (FY17: 364kg, 11 713oz). Zero gold production capitalised in FY16, FY15 and FY14

² As per income statement

³ Total exploration spend including capitalised amounts are R423 million (US\$33 million) (FY18), R438 million (US\$32 million) (FY17), R433 million (US\$30 million) (FY16), R385 million (US\$34 million) (FY15) and R470 million (US\$45 million) (FY14)

		FY18	FY17	FY16	FY15	FY14
People						
Total number of employees and contractors ⁷		40 686	33 201	30 547	31 114	34 746
South Africa: Employees		32 520	26 478	25 861	26 000	28 991
Contractors		5 951	4 512	4 580	5 012	5 695
Papua New Guinea: Employees ⁷		1 397	1 300	76	75	59
Contractors ⁷		818	911	30	27	1
Employment equity (historically disadvantaged South Africans in management) ⁸	%	⁵ 60	⁴ 61	⁴ 60	⁴ 58	⁴ 46
Number of people in single rooms ⁹		⁵ 6 739	⁴ 7 266	⁴ 7 252	⁴ 7 436	⁴ 1 678
Number of people sharing accommodation		⁵ 0	⁴ 0	⁴ 0	⁴ 0	⁴ 6 841
Number of people in critical-skill positions trained		⁵ 106	⁴ 75	⁴ 68	⁴ 69	⁴ 56
Community						
Group local economic development ¹⁰	R million	⁵ 20	⁴ 27	⁴ 18	⁴ 64	⁴ 77
Preferential procurement (BEE-compliant spend)	R million	⁵ 5 120	⁴ 4 461	⁴ 3 794	⁴ 3 849	⁴ 3 442
Total discretionary spend	R million	6 436	5 685	4 978	5 565	5 595
Preferential procurement spend	%	80	78	76	69	62
Environment						
Mineral waste (volume disposed) ¹²	000t	⁵ 50 798	^{4, 11} 38 392	⁴ 26 170	⁴ 24 659	⁴ 33 498
Total electricity use (purchased)	000MWh	⁵ 2 518	^{4, 11} 2 629	⁴ 2 597	⁴ 2 657	⁴ 2 798
CO₂ emissions						
– Scope 1	000t CO ₂ e	⁵ 131	⁴ 111	⁴ 56	⁴ 67	⁴ 75
– Scope 2	000t CO ₂ e	⁵ 2 442	^{4, 11} 2 513	⁴ 2 581	⁴ 2 686	⁴ 2 745
– Scope 3	000t CO ₂ e	⁵ 440	^{4, 11} 445	⁷ 615	⁴ 686	⁷ 661
Water used for primary activities	000m ³	⁵ 15 473	18 125	15 083	15 752	16 502
Funding/guarantees for rehabilitation and closure	R million	3 717	3 072	2 933	2 796	2 708

⁴ Assured by independent auditors in prior years – refer to <https://www.harmony.co.za/invest/annual-reports>

⁵ Assured by independent auditors in the current year. Please refer to the **Assurance Report** and to the **Glossary of Terms** on the website, www.har.co.za. All assured indicators exclude the results of Moab Khotsong from 1 March 2018 to 30 June 2018, except for the LTIFR and TIA safety indicators

⁶ The number of cases of pure silicosis confirmed by the South Africa's Medical Bureau of Occupational Diseases in FY14 and FY15. Previously we assured silicosis cases submitted to the Medical Bureau of Occupational Diseases

⁷ FY18 includes employees from the Moab Khotsong operations. Excludes employees from the Wafi-Golpu Joint Venture. FY16, FY15 and FY14 exclude employees from the Morobe Mining Joint Venture, which are included from FY17, following Harmony acquiring full ownership of Hidden Valley

⁸ 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 FY15 employment equity percentage

⁹ 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

¹⁰ In addition, capital of R1 million (US\$0.1 million) was spent in FY16 on the upgrading of hostel accommodation at various operations, (FY15: R89 million (US\$8 million), FY14: R106 million (US\$10 million))

¹¹ Increases recorded in FY17, a result of the acquisition in full of Hidden Valley which is now included at 100% versus 50% in preceding years

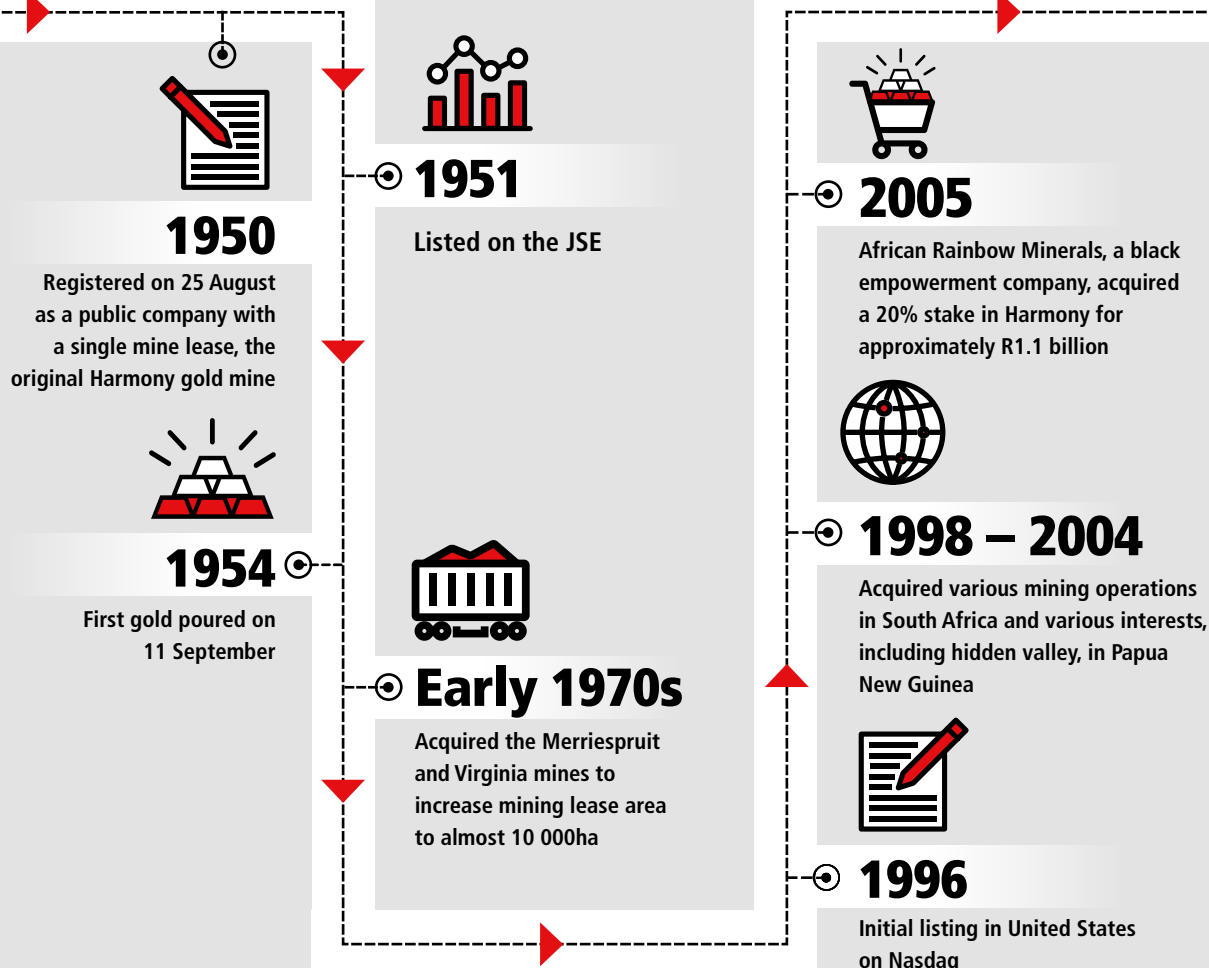
¹² The year-on-year increase in mineral waste in FY18 was due to waste stripping of the cutbacks at Hidden Valley

* Not previously assured

HARMONY – TIMELINE

TRANSFORMING HARMONY

Over close on seven decades, Harmony has become a global, multi-operational gold producer.



AVERAGE ANNUAL SPOT GOLD PRICE (CALENDAR YEARS):

1950
US\$35/oz
n/a

1974
US\$159/oz
R3 473/kg

1989
US\$381/oz
R32 162/kg

1998
US\$294/oz
R52 397/kg



2008

Morobe Mining Joint Ventures, a 50:50 partnership with Newcrest Mining Limited, established to explore, develop and manage projects and operations in Papua New Guinea, including Hidden Valley and Wafi-Golpu



2010

Hidden Valley reaches commercial production



2016

Full ownership of Hidden Valley acquired



2014

South African operations achieve first ever fatality-free quarter



2012

The Tlhakanelo employee share ownership scheme launched



2011

Mineral resources exceeding 13Moz gold and 4Mt copper (50% basis) declared at Wafi-Golpu



2017

First ever company-wide fatality-free quarter achieved during the year



2018

Acquired Moab Khotsoeng, a 17.5Moz resource and a low unit cost, cash-generating operation

AVERAGE ANNUAL SPOT GOLD PRICE (CALENDAR YEARS):

2008

US\$872/oz
R231 481/kg

2012

US\$1 699/oz
R440 951/kg

2014

US\$1 266/oz
R441 523/kg

2017

US\$1 257/oz
R538 306/kg

CHAIRMAN'S LETTER



"Harmony's safety risk management strategy, its values and visible leadership underpins its determination to achieve zero harm."

Dr Patrice Motsepe Chairman

Dear shareholders and stakeholders

During the financial year under review Harmony continued its increase in production volumes for the third consecutive year.

Gold production increased by 13% and the underground recovered grade increased by 8% in the past year, resulting in our all-in sustaining unit costs reducing to R509 000/kg. The newly acquired Moab Khotsoeng operations included in our portfolio from 1 March 2018 contributed significantly to our improved performance in FY18.

We acquired the Moab Khotsoeng operations and completed our reinvestment in Hidden Valley, as part of the strategy to increase our production profile and improve margins and cash flow. These operations will increase our annual production by 450 000 ounces, reduce unit costs and improve our cash flows.

We are thankful for the support from our shareholders who participated in the equity capital raise of R1.26 billion (US\$100 million) to partially fund the Moab Khotsoeng acquisition.

Harmony released an updated feasibility study in March 2018 for the Wafi-Golpu copper-gold project in Papua New Guinea which confirmed a large orebody with high grades, low operating costs and significant free cash flows. We are looking forward to its contribution to our production and cash flows when it becomes operational.

Further details of the company's operational and financial performance are provided in the *Chief executive officer's review* and the *Financial director's report*.

SAFETY AND HEALTH

Harmony's principal focus is on the safety and health of all our employees. We remain committed to achieving a target of zero harm.

Regrettably, 13 of our employees tragically lost their lives at our mines during the year. I send my heartfelt condolences to their families, friends and colleagues.

Harmony's safety risk management strategy, its values and visible leadership underpins its determination to achieve zero harm. A co-operative approach involving all stakeholders ensures that the appropriate infrastructure and systems are in place, including relevant planning, communication and training. We encourage employees to halt work when a workplace is considered unsafe. For further information in this regard, see the *Safety and health* section of the report.

Our company is an active participant in industry-wide health and safety initiatives. This year we reached an agreement with lawyers representing claimants in the silicosis class action. The settlement which is still subject to High Court ratification, represents a fair and just outcome for all stakeholders.

OUR EMPLOYEES

The acquisition of Moab Khotsoeng increased our total number of employees to approximately 38 500 in South Africa and 2 200 in Papua New Guinea. Our employees reside mainly in the communities neighbouring our mining operations and we paid R9.5 billion (US\$740 million) in salaries during the year.

Harmony invested R418 million (US\$32.5 million) in employee training. Employees were trained in critical skills, mentorship, hazard identification, risk assessment, mineral resource management and various other courses. We also awarded 101 bursaries to students studying at South African universities.

HARMONY'S COMMITMENT TO ITS HOST COMMUNITIES

Our commitment to involve and benefit the communities neighbouring our mines and to contribute to their development and growth is important for the long-term success of the company.

Harmony has given particular attention to the needs of the people living near our mines in the Free State in recent years. Harmony introduced an innovative community skills and development training programme in Welkom and the broader Matjhabeng area. It is aimed at empowering women and a whole new generation of young people. The programme's objective is to train participants in the skills that will help them to find jobs, not only in the mining sector but also in the broader economy. By the end of June 2018, 60 community members had participated in this initiative.

Enterprise development is a key focus area of our sustainable development strategy. Successful supplier days were held in the communities surrounding Doornkop, Joel, Kalgold and Kusasaletu. The purpose of these supplier days is to conduct structured and proactive engagement sessions within each municipal district, exposing local small, micro and medium enterprises

(SMMEs) to procurement and development opportunities within Harmony.

We paid R429 million (US\$33 million) in taxes and royalties in South Africa and Papua New Guinea. In addition, we spent R5.1 billion (US\$400 million) on local procurement and R74 million (US\$6 million) on socio-economic initiatives in our host communities in both countries.

THE SOUTH AFRICAN MINING INDUSTRY

The gold mining industry remains a key contributor to the South African economy. In the 2017 calendar year, the gold mining industry contributed R54.5 billion to the South African gross domestic product (GDP) and exported R82.7 billion worth of products as part of the country's R1.1 trillion exports. The gold mining industry employs approximately 112 000 people and in 2017 paid R29.5 billion in employee wages, salaries and benefits. Those employed by the gold mining industry in turn support an estimated 1.1 million dependants¹.

In addition to creating employment and contributing to GDP and the fiscus, the South African mining industry invested

approximately R2 billion in community development initiatives and created opportunities for SMMEs (small, medium and micro enterprises) through preferential procurement, supplier development and enterprise development¹.

Between 2007 and 2016, gross fixed investment by the South African mining industry slowed mainly due to a downturn in the commodity cycle, rapidly rising mining costs, uncertainty relating to the regulatory dispensation and the discussions on the Mining Charter between the government and the mining industry¹.

It is important that the South African mining industry continues to be globally competitive and attractive to domestic and international investment.

The new mining dispensation including the mining charter must ensure that the South African mining industry maintains and enhances investor confidence.

The mining industry should continue to create broad public awareness of its developmental and upliftment role which benefits workers, neighbouring communities and other stakeholders.

MY GRATITUDE

I would like to thank all our employees, our host communities and all other stakeholders for their support and cooperation during the past financial year.

I would also like to thank our chief executive officer, Peter Steenkamp and his management team for their leadership, hard work and contribution to the success and growth of Harmony.

We are pleased to welcome back Max Sisulu as an independent non-executive director. Max previously served on the Harmony board.

Our board of directors remains committed to robust corporate governance and ethical conduct. I am grateful and value the guidance and advice provided by our high-calibre, skilled and experienced directors.

I am confident that Harmony will build on the momentum achieved during this past year and will continue to create value for its shareholders and all our stakeholders.

Dr Patrice Motsepe
Chairman

25 October 2018

¹ Statistics provided by the Minerals Council South Africa.



Supporting education

CHIEF EXECUTIVE OFFICER'S REVIEW



"At Harmony, we are committed to delivering on our market guidance. Production guidance was achieved for the third consecutive year in FY18."

Peter Steenkamp Chief executive officer

From the time I joined Harmony in January 2016, our team has been committed to delivering on our market guidance. Production guidance was achieved for the third consecutive year in FY18.

The performance of our South African operations has been consistent. Availability of stoping panels and fewer unplanned engineering stoppages due to focused asset management and maintenance have improved the predictability of our production performance. Our disciplined grade management approach has also been important in delivering on guidance and mitigating cost inflation.

In FY16, we reported our aspiration to grow the company to 1.5Moz by June 2019. We are on track to realise this annual production target with the combined contributions of Hidden Valley and Moab Khotsong as well as consistent production from our other mines. This will be achieved through efficient capital allocation and managing our operations by focusing on what we can control – safety, production and costs.

SAFETY AND HEALTH

As the safety and health of our employees is of paramount importance, we are also committed to doing more to ensure a safe working place for all. Sadly, we had 13 fatalities in FY18 in eight separate events. Our colleagues who lost their lives were Saraseng Elias Moloko, Mohlomi Mokhele, Motshewa Matuba, Relebohile Mokemane, Mohlabane Moganedi, Moss Setlhafuno, Fusi Khalikana, Moelwa Emily Lethebe, Nyanisile Jacwana, Molatudi Mafereka, Ephraim Leholoo, Thembile Tsutsu and Kabelo Lebetsa.

We extend our personal, heartfelt condolences to their families, colleagues and friends. For additional information, see *Safety and health*.

Key aspects of our safety approach include:

- Stopping significant unwanted events by focusing on critical control management
- Actively leading and promoting a proactive culture
- Transforming our culture through continuous employee engagement, safety awareness and training as well as positive behaviour reinforcement
- Improving system monitoring and analysis to improve risk management

On 17 August 2018, the Minerals Council South Africa (formally the Chamber of Mines South Africa) launched the National Day of Safety and Health in Mining 2018 campaign as part of its recommitment to the shared goal of zero harm and ensuring that all employees are able to go to work knowing that they will return home unharmed every day. We hosted safety and health days at each of our operations in October 2018 to reaffirm our commitment to the safety and wellbeing of employees.

OPERATIONAL REVIEW

South Africa

Harmony's operations achieved gold production of 1.228Moz, exceeding our annual production guidance of 1.18Moz. The South African operations recorded a 14% increase in gold production and increased underground recovered grade by 8% to 5.48g/t.

Moab Khotsong produced 105 969 ounces (contributing 10% of the increase in SA gold production) for the four months the operation has been included in Harmony's asset portfolio. Furthermore, the operation contributed R460 million to our operational free cash flow and lowered the overall all-in-sustaining unit costs for the group.

Optimising the performance of Moab Khotsong will be a key focus area in FY19 as further cost reduction and efficiencies have been identified. Studies are currently underway to evaluate potential options to safely and optimally mine the Great Norigwa shaft pillar and other isolated pillars. The high-grade Zaaiplaats resource is an attractive growth opportunity. Progression of this project is subject to the feasibility study due to be completed by the end of June 2019.

An outstanding feature of the past year is that, with the exceptions of Unisel and Joel, all of our South African underground operations increased their gold production year-on-year. Overall underground grades have increased for the sixth consecutive year in line with our strategy to focus on the extraction of profitable ounces. Full details of our mining operations are provided on *Operating performance*.

Papua New Guinea

The Hidden Valley investment in the stage 5 and 6 cutback, and related plant and processing upgrades, was delivered on schedule and below budget (US\$175 million spent compared to investment planned of US\$180 million). Commercial levels of production were achieved in the June 2018 production month.

Stripping of the cutbacks will continue for the next three years to deliver an average life of mine all-in sustaining cost of below US\$950/oz.

The updated feasibility study of the Wafi-Golpu project released on 19 March 2018 proposed a larger mine and increased production profile, resulting in a 33% increase in net present value to US\$2.6 billion (applying a real discount rate of 8.5%)¹.

Engagement by the Wafi-Golpu Joint Venture with the Papua New Guinea government on the application for a special mining lease for the Wafi-Golpu project is progressing well.

OUR PEOPLE

The employee relations environment was stable this past financial year. In South Africa, wage negotiations for the three years beginning 1 July 2018 were successfully concluded with unions representing 69% of employees.

For more employee-related initiatives, see *Employee engagement* in this report.

MINING CHARTER

The latest version of the Mining Charter (referred to as Mining Charter III) was gazetted by the Minister of Mineral Resources in September 2018.

Harmony, through the Minerals Council South Africa, is engaging with the

Department of Mineral Resources on certain issues of concern and we are optimistic that we may reach an amicable solution.

CONCLUSION

In our review of the past year, it is evident that Harmony's people remain committed to working as a team in the interests of the company with sustainability in mind. I extend my thanks to everyone and look forward to further positive collaboration in future. My thanks also go to our chairman Dr Patrice Motsepe and to all Board members for their continuing support and counsel.

Peter Steenkamp
Chief executive officer
25 October 2018

¹ Harmony has a 50% equity stake in the Wafi-Golpu project, which is held in a 50:50 joint venture with Newcrest Mining Limited. These figures are quoted on a 100% basis.



● Tshepong

FINANCIAL DIRECTOR'S REPORT



"We're delivering on our growth aspirations through the acquisition of Moab Khotsong and the Hidden Valley re-investment plan."

Frank Abbott Financial director

KEY OUTCOMES

FY18

- Successfully acquired and integrated Moab Khotsong
- Hidden Valley re-investment plan delivered safely, on schedule and within budget
- R1.8 billion generated in cash flow through the group's hedging strategy

Moab Khotsong acquisition

On 1 March 2018, Harmony acquired the Moab Khotsong and Great Noligwa mines and related infrastructure (collectively Moab Khotsong) from AngloGold Ashanti. In the four months to year end, Moab Khotsong contributed:



REVENUE

R1.7 billion (US\$140 million)



OPERATIONAL FREE CASH FLOW

R460 million (US\$36 million)



NET PROFIT

R208 million (US\$17 million)

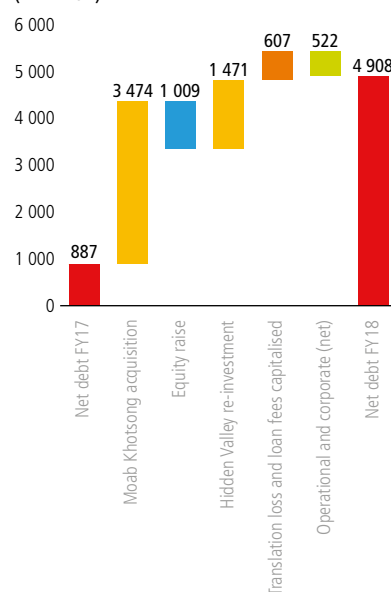
The acquisition has enhanced group production, underground recovered grade, all-in sustaining unit costs and operating free cash flow. Work continues on further optimising operational performance at Moab Khotsong so as to enhancing synergies.

The acquisition purchase price was a cash consideration of the rand equivalent of US\$300 million (R3.5 billion), of which US\$100 million was funded using the existing US\$350 million syndicated facility and the remaining US\$200 million was funded using a bridge loan.

The group successfully conducted a two-part share placement to raise up to R1.3 billion (US\$100 million), the proceeds of which, together with internally generated cash resources, were used to repay the bridge loan. US\$150 million of the bridge loan was repaid during the financial year and the remaining outstanding balance of US\$50 million was settled post financial year end.

At 30 June 2018, the group's net debt/ EBITDA ratio stood at 1.0x (0.3x at 30 June 2017), largely as a result of the debt drawn to fund the Moab Khotsong acquisition. A ratio of 1.0x compares favourably to South African and international gold mining peers, and the group will target a ratio of less than 1.0x. A reduced ratio will be achieved through continued implementation of our strategy to increase margins and repay debt.

Funding quality growth (R million)



Cash certainty

Realised cash gains from the hedging programmes in FY18 were as follows:

- Currency hedges – R698 million (US\$54 million)
- Commodity hedges – R1.1 billion (US\$87 million)

The hedging programmes are topped up as and when opportunities arise to lock-in attractive margins for the business. A meaningful proportion of the group's expected production and foreign currency export proceeds have already been secured at beneficial margins.

Open hedging contracts as at 30 June 2018:

		FY2019		FY2020		Total
		H1	H2	H1	H2	
Rand gold						
Forward contracts	000oz	105	94	77	24	300
	R000/kg	660	623	631	640	639
Dollar gold						
Forward contracts	000oz	48	38	10	–	96
	US\$/oz	1 290	1 336	1 382	–	1 318
Total gold contracts	000oz	153	132	87	24	396
Currency hedges rand dollar						
Zero cost collars	\$m	147	105	–	–	252
	Floor (R/US\$)	14.11	13.11	–	–	13.69
	Cap (R/US\$)	15.09	13.78	–	–	14.54
Forward contracts	\$m	67	134	36	36	273
	R/US\$	13.51	13.69	14.68	15.03	13.95
Total rand dollar	\$m	214	239	36	36	525
Dollar silver						
Zero cost collars	000oz	480	180	90	–	750
	Floor (R/US\$)	17.10	17.30	17.40	–	17.19
	Cap (R/US\$)	18.10	18.30	18.40	–	18.19

Impairment

An impairment of R5.3 billion (US\$386 million) was recognised during the year, driven largely by cost inflation coupled with a subdued forecast gold price of R535 000/kg (US\$1 250 at R/US\$13.30) and the resulting effect on margins.

Given the lower prices paid for resources in recent times, particularly among South African gold resource companies, lower resource multiples were used to value our outside life-of-mine resources, resulting in reduced resource valuations. This affected our undeveloped Target North property as well as a certain portion of the Doornkop operation's outside life-of-mine resources.

The FY18 impairment was made up as follows:

Operation	Impairment R million
Target North*	1 458
Tshepong operations	988
Target 1	699
Kusasaletu	579
Unisel	487
Masimong	329
Doornkop*	317
Other assets	319
Joel	160
Total impairment	5 336

* Impairment primarily driven by lower resource multiples

- Tshepong operations and Joel presented a decrease in recovered grade as per their respective updated life-of-mine plans
- Drilling results at Target 1 pointed to lower grade estimates within certain blocks that have now been excluded from the life-of-mine plans
- Kusasaletu's old mine was excluded from the operation's FY19 life-of-mine plan
- Unisel took on a reduced life-of-mine plan as the mining focus was re-directed to higher-grade areas
- Masimong depleted its higher-grade Basal Reef and its life-of-mine plan was thus reduced

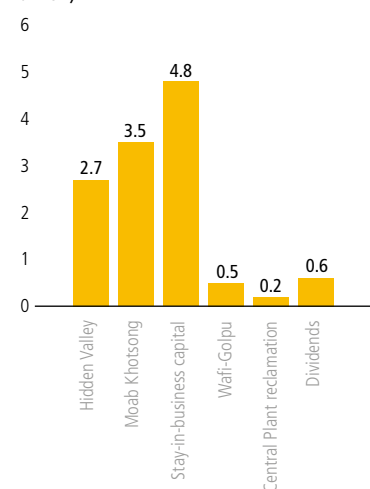
Continuous evaluation of the group's orebodies and the exclusion of lower-grade mining areas enabled the group to effectively allocate capital and resources in line with its strategy to produce safe, profitable ounces and to increase margins.

Capital allocation

Capital expenditure in FY18 increased by 16% to R4.3 billion (23% to US\$333 million) of which R1.5 billion (US\$116 million) was spent at Hidden Valley.

Capital expenditure at our South African operations increased by 16% or R366 million (22% or US\$38 million). Capital expenditure of R4.6 billion (US\$343 million) is planned for FY19.

FY17 and FY18 capital allocation (R billion)



The group's focus is to sustain the current revamped portfolio while simultaneously evaluating organic growth opportunities with particular emphases on Moab Khotso, Hidden Valley and Wafi-Golpu. Key milestones in FY19 will be the completion of prefeasibility studies for the Mispah tailings, Hidden Valley extension and the Zaaiploots projects.

FINANCIAL DIRECTOR'S REPORT CONTINUED

Financial performance

Our FY18 performance was substantially affected by the addition of Moab Khotsoong and the hedging programmes that continued to contribute to favourable cash margins.

Key drivers of financial performance FY18

		FY18	FY17	Change %
Gold produced	kg	38 193	33 836	13
	oz	1 227 934	1 087 852	13
Underground grade recovered	g/t	5.48	5.07	8
Gold price received	R/kg	570 709	570 164	–
	US\$/oz	1 380	1 304	6
Production profit	Rm	5 356	4 452	20
	US\$m	416	327	27
All-in sustaining costs	R/kg	508 970	516 687	1
	US\$/oz	1 231	1 182	(4)
Net debt	Rm	4 908	887	>(100)
	US\$m	356	68	>(100)
Net debt/EBITDA ratio	times	1.0x	0.3x	
Average exchange rate	R/US\$	12.85	13.60	(6)

Income statement – extract

	FY18	FY17	Change %
Revenue	20 359	19 264	6
Production costs	14 991	14 812	(1)
Impairment of assets	5 336	1 718	>(100)
Corporate administration and other expenditure	813	517	(57)
Gains on derivatives	99	1 025	(90)
Net profit/(loss) for the year	(4 473)	362	>(100)
Headline earnings per share (SA cents per share)	171	298	(43)

Revenue and production costs were impacted mostly by the inclusion of Moab Khotsoong for four months of FY18, with the benefits of that being offset by Hidden Valley's stages 5 and 6 development, resulting in revenue and production costs being capitalised to property, plant and equipment.

Revenue increased 6% by R1.1 billion (US\$168 million) to R20.4 billion (US\$1.6 billion). Moab Khotsoong contributed R1.7 billion (US\$140 million), which was offset by Hidden Valley (R1.1 billion (US\$80 million)) in comparison to the previous year.

Production costs included R1.0 billion (US\$79 million) as a result of the addition of Moab Khotsoong. This was offset by Hidden Valley operating costs which were lower by R1.1 billion (US\$84 million).

Corporate, administration and other expenditure increased by 57% to R813 million (66% to US\$63 million), relating mostly to the once-off financing and integration costs associated with the acquisition of Moab Khotsoong.

Gains on derivatives recorded a net gain of R99 million (US\$8 million) in FY18 compared with a net gain of R1 billion

(US\$75 million) in FY17. The gain was largely due to the foreign exchange hedging contracts following favourable exchange rate movements in FY17, a substantial portion of which was realised in FY18.

Headline earnings were impacted by lower gains on derivatives, as discussed above, as well as a foreign exchange translation loss of R682 million (US\$53 million) compared with a foreign exchange gain of R194 million (US\$14 million) in FY17.

Frank Abbott
Financial director
25 October 2018



OUR STRATEGY AND INVESTMENT CASE



OUR STRATEGY

To produce safe, profitable ounces and increase our margins

STRATEGIC PILLARS

01



OPERATIONAL EXCELLENCE

Prioritising safety, strict cost control and management of grades mined, disciplined mining and improved productivity

What we did in FY18

- Production up 13% to 1.228Moz
- At South African operations, underground grade recovered increased by 8% – sixth consecutive annual increase
- Lower unit costs as measured by all-in sustaining costs
- Improved lost-time injury frequency rate by 13% to 6.26 per million hours worked

Focus in FY19

- Improve safety performance
- Realise synergies at Moab Khotsonong
- Deliver on Hidden Valley plan

02



CASH CERTAINTY

Achieving operational plans, supported by the current hedging strategy, contributes to cash flow certainty

What we did in FY18

- Achieved or exceeded production guidance for third consecutive year
- Hedging strategy continued to boost cash flow margins

Focus in FY19

- Exceed operational plans so generating free cash flow
- Repay debt
- Continue hedging programme

03



EFFECTIVE CAPITAL ALLOCATION

Evaluating and prioritising organic growth opportunities and value-accretive acquisitions to ensure positive stakeholder returns and increase margins

What we did in FY18

- Hidden Valley re-investment plan delivered on time and on budget
- Acquisition of Moab Khotsonong has enhanced our portfolio

Focus in FY19

- Secure Wafi-Golpu permitting and funding
- Evaluate organic growth opportunities

OUR INVESTMENT CASE

Safe, profitable 1.5Moz producer	Financially strong	Real growth opportunities	Offering share price uplift
<ul style="list-style-type: none"> • Focus on improving safety performance • Moab Khotsong and Hidden Valley to contribute to annual production of 1.5Moz • Consistent delivery on production guidance 	<ul style="list-style-type: none"> • Operational delivery on business objectives will generate positive operational cash flow • Hedging programme contributing positively to cash flow 	<ul style="list-style-type: none"> • Wafi-Golpu permitting underway • Organic brownfields opportunities include: <ul style="list-style-type: none"> • Tailings expansion • Kalgold exploration • Great Noligwa and Zaaipiaats • Hidden Valley extension 	<ul style="list-style-type: none"> • Improved market capitalisation (up 12% year-on-year at 30 June 2018)

OUTLOOK

On track	Driving down	Delivering	Cash flow
to deliver a sustainable production performance	unit costs by producing quality ounces	on our strategy to increase margins	to be effectively allocated to growth opportunities

OUR BUSINESS CONTEXT



Relevant GRI indicator: G4-EC8

Understanding our operating environment

To help position Harmony for success, it is vital to identify those external factors that impact our internal operations and to understand how they affect our ability to deliver on our strategic objectives. Identifying and understanding these external factors requires regular, transparent and consistent stakeholder engagement. This section should be read in conjunction with *Material issues and stakeholder engagement*

Stakeholder engagement

External stakeholders – including communities, labour unions, non-governmental organisations and media – influence the public debate on mining's contribution to society

EXTERNAL ENVIRONMENT

Occupational lung disease (silicosis) settlement

- A sustainable, inclusive and comprehensive solution was agreed in May 2018 (to be ratified by court)
- A legacy fund is to be established – Harmony has estimated its share of settlement and has recognised a provision of R925 million (FY17: R917 million)
- Harmony's RECONNECT initiative has made contact with 8 795 former employees to whom the Department of Health has paid R168 million in claims to date

See *Safety and health*

Potential liability for occupational lung disease compensation in South Africa

Harmony, through the gold mining industry occupational lung disease working group, has been working towards a settlement since November 2014

EXTERNAL ENVIRONMENT

Balancing shareholder and stakeholder expectations

- Engagement is informed by stakeholders, our operating environment, material issues, risks and opportunities
- Regular, open, honest and transparent communication is underpinned by our values

INTERNAL ENVIRONMENT

Maintaining social licence to operate – our environmental, social and impact on host communities

- Our aim is to influence, develop and support the socio-economic sustainability of communities
- Ensure efficient use of resources (water and energy)
- Limit, and where possible eliminate, our environmental footprint through conservation and rehabilitation programmes

Sharing resources

- While sufficient, reliable supplies of water and electricity are essential to the safe, efficient conduct of our mining operations, access to water and electricity remain important social, environmental and economic issues, particularly in a resource-constrained country such as South Africa
- Various measures have been implemented to improve water use efficiency and to reduce consumption by recycling
- Successful energy consumption strategies have reduced our carbon footprint

See *Environmental management and stewardship* and *Socio-economic development*

Social licence to operate

Responsible environmental stewardship is an important aspect of acquiring and maintaining our social licence to operate

As a business, we operate in a complex and ever-changing external environment that involves social, political, economic and environmental changes in the short, medium and long terms

Commodity price and exchange rate volatility

Long project lead times and a lack of flexibility to rescale operations in response to price fluctuations can impact sustainable cash generation over the long term

Economic outlook

- Our long-term view of the gold price remains positive. The global economy has been characterised by uneven growth, increased geopolitical tensions and a stronger US dollar. This has been aggravated by the potential trade war threatened by the United States and, post year-end, the emerging market crisis sparked by Argentina and Turkey. The latter is having an adverse impact on related currencies, including the rand. Our hedging strategy is helping to lock in cash margins over the short term

See *Financial director's report*

EXTERNAL ENVIRONMENT

Ensuring business sustainability

Entails:

- Disciplined cost control
- Increased productivity
- Prioritising organic growth opportunities

INTERNAL ENVIRONMENT

Ensuring employee safety and well-being

- Providing training and development
- Preventing and treating HIV/Aids and tuberculosis (TB)
- Competing to recruit and retain skilled employees
- Addressing employment equity and equality

Volatile labour relations environment in South Africa

Labour relations in South Africa are complicated by inter-union rivalry

Wage negotiations

- In South Africa, Harmony negotiates changes to wages and other conditions of employment through a recognised collective bargaining structure, under the auspices of the Minerals Council
- Three-year wage agreement reached in October 2018

EXTERNAL ENVIRONMENT

Regulatory certainty and adapting to legislative changes and amendments

This is key to the future success and sustainability of the mining industry

Regulatory certainty

- In South Africa, Mining Charter III was gazetted in September 2018 and Harmony, through the Minerals Council, is engaging with the Minister of Mineral Resources on certain areas of concern
- In Papua New Guinea, we are active in industry working groups and the local Chamber of Mines on proposed amendments to the Mining Act

MANAGING OUR RISKS AND OPPORTUNITIES

The effective governance and management of our risks and opportunities are fundamental to and underpin our ability to deliver on our strategic objectives, and on our ability to create sustainable value.

Effective enterprise risk management involves identifying and understanding the risks and opportunities facing our business. By understanding those variables in our internal and external operating environments that create uncertainty and risk, we are better able to alleviate the effects of such risks and to position Harmony to take advantage of any opportunities, future challenges and growth prospects.

OUR RISK MANAGEMENT PROCESS

At Harmony, our approach to risk relies on the ongoing monitoring of risk and related mitigation procedures and, when appropriate, their revision. These activities are embedded in our day-to-day activities and processes at an operational level, in our governance structures and at policy level. Our risk management process aims to be practical and effective, rather than focusing solely on compliance.

While our risk management process is guided by specific regulatory and legislative requirements, internally, it is championed by our chief executive officer. Management is responsible for implementation and compliance, and the audit and risk committee is responsible for oversight of the risk management process and for its adequacy and effectiveness.

Risk management has, as its starting point, our business strategy and related strategic objectives. Understanding those factors that have the potential to limit our ability to deliver on our strategy is vital, as is identifying those opportunities that will enable us to achieve our goals. We also benchmark the risks and opportunities identified against those of our peers to ensure that the risks identified include not only those specific to Harmony but also those facing the gold mining industry as a whole.

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

Quarterly risk examination is based on 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 an ongoing conversation about risk at different levels, allowing any changes to be captured on a continuing basis.

In addition, formal weekly operational and safety risk reviews are undertaken by management teams to identify and prioritise specific, high-risk issues at an operating level. These reviews are reported to the respective regional general managers with additional oversight by the operations' committees.

Roles of the board and audit and risk committee

Risk is a standard agenda item at audit and risk committee meetings with the committee's role in our risk management process being multi-dimensional. Its primary role is that of oversight of risk governance and ensuring that strategic risks are appropriately addressed and managed. Operational and safety specific risks are monitored by the technical committee of the board. Our risk management process reflects our integrated approach to business and the audit and risk committee – supported by 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, methodology and planning, formal risk assessment, internal controls and assurance processes, our risk appetite and tolerance and our responses to the risks identified. Once the audit and risk committee is satisfied with these, responsibility for their implementation devolves to executive management and their teams. In turn, their task is to ensure that these risk processes are constantly applied in day-to-day activities.

Based on these reviews, the audit and risk committee submits its findings to the board. The top strategic, operational and safety-specific risks and mitigating factors are reported to the board on a quarterly basis.

Our risk appetite statement

Harmony is in the business of gold mining, we are involved in the entire gold mining value chain – from exploring for

prospects, conducting feasibility studies and building, buying and operating mines to closing and rehabilitating mines at the end of their productive lives. The nature of our operations and the environment within which we operate expose the business to internal and external risks and opportunities that can impact our ability to generate sustainable value for our shareholders and stakeholders. These risks and opportunities are carefully evaluated and managed.

We have expertise in operating in emerging economies and have the ability and experience to manage the socio-political circumstances in these countries. We have developed the skills to deal with the challenges of multi-stakeholder labour relations, the latter is especially so at our deep-level gold mines in South Africa, which are labour intensive and unionised.

We have an appetite for change and continuous improvement, we continuously strive to improve the safety and health of our employees, and are constantly looking for innovative and cost effective ways to optimise performance at our operations.

Our strategy to produce safe, profitable ounces and increase margins has led us to acquire and invest in mines that can be operated more efficiently and that can enhance our ability to achieve our strategic objectives. As exploration is one of the most effective ways to grow and develop an orebody and to create value, we continue to explore in the vicinity of our operations and in new regions in Papua New Guinea.

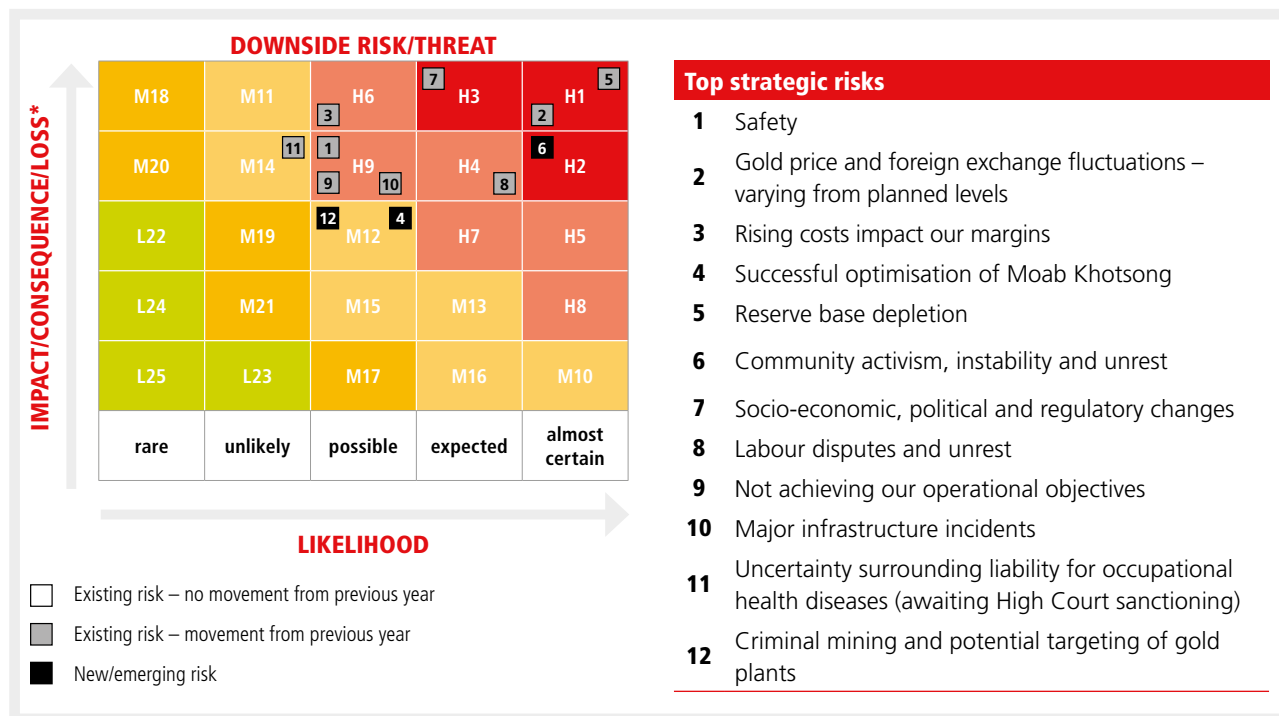
We have experienced, values-driven teams committed to delivery on our strategic objectives.

Determining our most significant risks and opportunities

We formulate group-level risk appetite and tolerance levels, and continue to monitor our risks to identify and manage those that are most material to the company. While our group-level risk appetite and tolerance levels are subject to formal annual reviews, these are continually monitored for relevance in terms of changing macro-environment factors. Our tolerance levels are further defined at lower tolerance limits per risk.

OUR TOP RISKS AND OPPORTUNITIES

Our risk profile is based on potential events and/or factors that pose either a threat and/or an opportunity. These downside and upside risk factors are duly taken into account in our day-to-day business activities and, having been identified, are integral to the formulation and management of our group strategy.



* As measured by the estimated likely impact on earnings and net present value

MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

Top strategic risks

Below are the top risks by ranking (the information in brackets indicates the previous year's ranking).

Risk / Issue	Description	Link to strategy	Mitigation
1 Safety	<p>Safety performance has a direct impact on our ability to deliver safe, profitable ounces. While we prioritise safety primarily to protect our people, it also has the potential to halt production, affect our reputation and stakeholder relations, lead to litigation and decrease Harmony's overall value.</p> <p>While safety risks are heightened in deep-level mining, fatalities are not acceptable.</p>	Safety is integral to the sustainability of our business. Striving to ensure the safety of employees creates a common goal and purpose, helps maintain stable production and ensures that we retain our licence to operate.	<ul style="list-style-type: none"> • Safety, our first value, underpins all we do. Apart from the everyday safety procedures in place, we engage with employees regularly on safety through training sessions, awareness campaigns and open discussions. We continually adopt industry-leading safety practices • Key aspects of our safety approach are: <ul style="list-style-type: none"> • preventing fatalities • active safety leadership and a proactive safety culture • embedding our culture of safety • implementing systems to improve risk management • Roll-out and implementation of a four-layered, risk-based safety approach • An enhanced second-level audit team reviews the qualitative work and actions taking place on mine and corrective measures implemented • A fatality risk management programme has been implemented and the frequency increased of workplace inspections by senior management, including weekly meetings with safety representatives and team leaders
2 Gold price and foreign exchange fluctuations – varying from planned levels	<p>Harmony is a price-taker. The price received for gold we produce and sell is determined in US dollars on global markets and, as a mainly South African-based company by the rand-US dollar exchange rate.</p> <p>Commodity prices and exchange rates are impacted by global factors over which Harmony has no control.</p> <p>Should the US dollar gold price decline, this could impact revenue and reduce our margins. Similarly, a stronger rand reduces rand revenue earned. Exchange rate movements can also adversely impact costs.</p>	Operational excellence is key to maximising cash flows. Hedging contracts provide short term cash certainty.	<ul style="list-style-type: none"> • Our commodity price and exchange rate hedging strategy and programme implemented for a limited portion of production counters the strengthening rand/US dollar exchange rate and lower commodity prices. Management continues to top up these programmes as and when opportunities arise to lock in attractive margins for the business • While our hedging strategy has been successful thus far, we have also applied conservative price assumptions and effective capital allocation in our planning process, restructured underperforming assets and ensure that sufficient funding facilities are available

Top strategic risks continued

Risk / Issue	Description	Link to strategy	Mitigation
3 Rising costs impact our margins	<p>Harmony has a mixed portfolio of assets ranging from operations with growth opportunities, high grade but short lives and operations that have low margins and nearing the end of their operating lives.</p>	<p>Profitable operations will ensure positive operational cash flow and cash certainty.</p>	<ul style="list-style-type: none"> • A plan emphasising operational excellence has been implemented. Its ultimate aim is to enhance our margins and ensure we achieve our strategic objective by focusing on employee safety and health, improving grades, managing our assets, improving productivity and cost control (which includes optimising overheads and reducing allocated costs) • Loss-making operations are closely managed and turnaround plans implemented. If unsuccessful, these operations will be closed • We will pursue organic growth and acquisition opportunities that will produce better quality ounces at a lower all-in sustaining cost
4 Successful optimisation of Moab Khotsong	<p>Not fully optimising the Moab Khotsong operations will limit our ability to increase margins.</p>	<p>The acquisition of Moab Khotsong is aligned with our strategy, given its annual production capacity of more than 250 000 ounces and lower cost profile. Further cost reduction and resource conversion opportunities will enhance our ability to increase margins.</p>	<ul style="list-style-type: none"> • Successful integration of Moab Khotsong and reduction in costs since its acquisition • Experienced management and technical pillar mining teams are assessing and managing the potential optimisation of the Moab Khotsong operation • Implementing our cost management and procurement approach and productivity efficiencies, together with comparatively lower overhead costs, will further enhance margins
5 Reserve base depletion	<p>Our current reserve base is forecast to decline sharply within five years. Maintaining the reserve and resource pipeline necessary to sustain future production is vital to our long-term outlook and our ability to fund and develop the Wafi-Golpu project. While our exploration programme aims to establish such a pipeline, the risk is that our exploration may not contribute to an increased reserve base. Growing and acquiring ounces is vital to the sustainability of Harmony's business in the long term.</p>	<p>By ensuring a future production pipeline of quality ore reserves will enable us to operate sustainably and profitably.</p>	<ul style="list-style-type: none"> • Acquisitions of Moab Khotsong and the remaining 50% of Hidden Valley have enhanced our reserve and resource base • Identifying further value accretive acquisitions in South Africa, Papua New Guinea or elsewhere in Africa that meets our low unit cost investment criteria • Assessing, ranking and advancing of organic growth and exploration projects • Advancing the permitting for the Wafi-Golpu project

MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

Top strategic risks continued

Risk / Issue	Context/description	Potential impact on delivery of our strategy	Mitigation plans in place
6 Community activism, instability and unrest	In South Africa, there is a correlation between a lack of municipal service delivery and community unrest and protests. This is exacerbated by high levels of unemployment in many of the communities surrounding our mining operations. There has been increased expectation of mining companies to address service delivery shortfalls, provide jobs and contribute to local socio-economic development.	Community unrest has the potential to impact production, our reputation and our social licence to operate. Maintaining our social licence to operate is essential to the sustainability of our business and we strive to be a responsible corporate citizen.	<ul style="list-style-type: none"> • Developing and maintaining healthy relationships with all stakeholders is important in understanding concerns and expectations, and is vital in mitigating this risk • We meet regularly with community leaders to address community concerns and manage expectations and ensure our social and labour plans are aligned with municipal economic development plans • Establish long-term partnerships with communities on social delivery
7 Socio-economic, political and regulatory changes	Maintaining our licence to operate entails, among others, complying with all relevant socio-economic, political and regulatory changes in the countries in which we operate.	<p>Maintaining our licence to operate is essential to the sustainability of our business and we strive to be socially responsible. Not complying with regulations or addressing stakeholder expectations could impact our reputation and investor confidence in our business. It could also mean incurring fines for non-compliance or that we could lose our licence to operate. <i>See our Form 20-F, 2018: "Laws governing mineral rights affect our business and could impose significant costs and burdens. Mineral rights in the countries in which we operate could be altered, suspended or cancelled for a variety of reasons, including breaches in obligations in respect of such mining rights."</i></p> <p>Economic impact of proposed regulatory changes on operations and the Wafi-Golpu project</p>	<p>Engagement with regulators is essential in addressing this risk and influencing policy and legislation:</p> <ul style="list-style-type: none"> • In South Africa, we engage through the auspices of the Minerals Council South Africa, contributing to industry feedback on proposed amendments to mining legislation and entering into high-level contact with government officials • In Papua New Guinea, Harmony, through the Wafi-Golpu joint venture, participates in industry/state working groups with the local Chamber of Mines on proposed legislative changes to the Mining Act and on required permitting for Golpu; there is also regular consultation/interaction with relevant government officials, ministers and regional stakeholders

Top strategic risks continued

Risk / Issue	Context/description	Potential impact on delivery of our strategy	Mitigation plans in place
8 Labour disputes and unrest	<p>In South Africa, unstable labour relations is a heightened risk facing the mining industry. This would undermine our efforts to bring economic stability to the communities where we work. The 2018 gold wage negotiations are currently underway.</p> <p>In Papua New Guinea, while our workforce is not unionised, if unmanaged, there is a risk that labour, a large number of whom are also local landowners, could embark on industrial action, work stoppages and damage property and assets, and pose safety and security risks.</p>	<p>A supportive, stable, productive workforce will enable us to meet our operational targets and strategic objectives.</p>	<ul style="list-style-type: none"> • Effective mitigation of this risk relies on continuing employee engagement with prompt action being taken to address any emerging issues and concerns • In South Africa, proactive and robust engagement with employees and organised labour is ongoing, at both mine and company level, and includes monthly presentations of operational performance to union structures. Union representatives are empowered and receive training. Collaboration and co-existence are encouraged in the prevailing multi-union environment • Remuneration is reviewed regularly to ensure fair and responsible pay • Specific action has been taken to address employee indebtedness. Financial literacy training is provided and systems implemented to manage emolument attachment and garnishee orders • Pragmatic and controlled bargaining unit wage negotiation process, conducted under the auspices of the Minerals Council South Africa • Our human resources policy framework has been enhanced to more effectively manage conditions of employment and an employee relations policy framework is being formalised to strengthen engagement and dispute resolution processes • In Papua New Guinea, we continuously engage with all stakeholders, including employees, provincial and local government, landowners and regulators

MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

Top strategic risks continued

Risk / Issue	Context/description	Potential impact on delivery of our strategy	Mitigation plans in place
9 Not achieving our operational objectives	<p>While the risk exists that we may not meet production objectives, it is something we monitor closely. Unplanned events, such as safety-related incidents and stoppages and illegal mining, as well as gold price fluctuations can all affect our operational results and cash flows, and thus our ability to meet our strategic objectives. These factors, together with labour productivity and mining flexibility, are closely monitored. Not meeting our operational targets would impact our financial results and investor confidence, and could eventually lead to mine closures.</p>	<p>Achieving our operational objectives is at the crux of our strategy as this will allow us to strengthen and grow our business and to ultimately share the value created with shareholders and stakeholders.</p>	<ul style="list-style-type: none"> • We continue to identify and implement initiatives to improve productivity. To assist with meeting our objectives, operational risk management and planning were enhanced, and regional general managers have been given greater oversight and responsibility, supported by the engineering discipline. Increased security intelligence is being used to combat illegal mining • In the medium to long term, our aspiration is to diversify away from high-cost mines in favour of gold and copper opportunities in South Africa, the rest of Africa and Papua New Guinea. Strict cost and capital controls remain in place
10 Major infrastructure incidents	<p>As a mining company, we rely on large infrastructure and equipment to conduct our mining activities. Any breakdowns or infrastructure failures have the potential to threaten employee safety as well as to disrupt production, which can lead to expensive, time-consuming repairs.</p>	<p>By ensuring that infrastructure and equipment malfunctions are kept to a minimum, we are better able to achieve our operational targets and strategic objectives.</p>	<ul style="list-style-type: none"> • We spend a considerable amount of capital and time on the maintenance of infrastructure to proactively address any potential problems • Operational risk management processes have been improved and senior engineering capacity strengthened to mitigate engineering risks. A holistic engineering strategy has been implemented to enhance infrastructure maintenance and performance

Top strategic risks continued

Risk / Issue	Context/description	Potential impact on delivery of our strategy	Mitigation plans in place
11 Uncertainty surrounding liability for occupational health diseases	<p>Uncertainty regarding liabilities and compensation for occupational health diseases continues, particularly regarding work-related legacy illnesses.</p> <p>This risk is compounded by:</p> <ul style="list-style-type: none"> • Pending settlement in the class action case against the South African mining industry regarding silicosis • Proposed amendments to the Occupational Diseases in Mines and Works Act • Backlog of cases, for both tuberculosis and silicosis, at the Compensation Commissioner for Occupational Diseases in Mines and Works 	<p>Potential two-fold impact:</p> <ul style="list-style-type: none"> • Employees are at the heart of our business and we do all we can to ensure their safety and health • Additional or increased liabilities for occupational disease could decrease our cash flow and make us less resilient in the future 	<ul style="list-style-type: none"> • Pro-active health strategy and the <i>At work</i> management programme are aimed at mitigating health risks • Industry-leading practices to eliminate dust underground have been implemented • Gold working group on silicosis and related actions: <ul style="list-style-type: none"> • Silicosis litigation – settlement was concluded with all stakeholders on 3 May 2018 – pending High Court sanction • Harmony's RECONNECT initiative to locate pending cases of occupational lung disease traced around 8 800 Harmony beneficiaries of claims certified by the Medical Bureau for Occupational Diseases, for which related benefits totalling R168 million were paid out • In addition, former employees with outstanding social benefits registered with the Mineworkers' Provident Fund are now being assisted to claim their benefits via the Harmony RECONNECT initiative

MANAGING OUR RISKS AND OPPORTUNITIES CONTINUED

Top strategic risks continued

Risk / Issue	Context/description	Potential impact on delivery of our strategy	Mitigation plans in place
12 Criminal mining and targeting of gold plants in South Africa	<p>Certain mothballed shafts, ventilation shafts and unused haulages are used to access old workings and distribute food to criminal miners. Once these shafts have been closed, illegal miners turn their attention to gaining access to underground workings via operational shafts, and this may lead, ultimately, to their targeting the gold plants.</p> <p>Other related concerns include:</p> <ul style="list-style-type: none"> • Endangering safety of employees • Theft of gold bearing material and copper cables and damage to equipment • Resulting loss of production • Employee collusion, fraud and corruption 	<p>The negative effects of criminal mining and possible attacks on our gold plants include, among others, the potential loss of life, of both illegal miners themselves and of Harmony employees, damage to mine assets and production losses. In addition, there is the risk of damage to our reputation and stakeholder relations, and the possibility of litigation.</p>	<ul style="list-style-type: none"> • A number of redundant shafts have been demolished, filled and closed • Tactical security teams have been deployed underground at our operational shafts and on surface to combat illegal miners • Security is being conducted in collaboration with South African Police Services • Employee and community anti-criminal mining awareness campaigns are conducted • Stricter security measures are employed at underground access points

For more detailed information relating 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/invest/annual-reports.

The risk that is no longer among our top strategic risks is:

- **Cyber security:** the management of the information technology security risk is a continuous process. See the *Audit and risk committee: chairman's report* for further details

Top strategic opportunities

Corresponding with several of the risks facing our business, there are related opportunities. We have identified several of our main opportunities, ranked as follows:

Opportunity	Potential impact on delivery of our strategy
1 Gold price and foreign exchange fluctuations – varying from planned levels Related risks: 2 and 3	<p>Our business is highly geared to the dollar gold price and fluctuations in the rand-US dollar exchange rate. Increases in the gold price, in either rands or US dollars, provide a significant and immediate gain.</p> <p>Our ability to deliver on production and growth targets and increase margins to counter lower commodity cycles is important.</p>
2 Productivity improvements Related risks: 1, 3 and 9	<p>To be a successful business, we need to produce sufficient gold to be profitable, which is a function of a healthy and productive workforce. Having a skilled, healthy, motivated, engaged workforce will enable us to achieve our gold production targets. Enhanced labour productivity is supported by maintaining our infrastructure, improving technical efficiencies and ensuring safe working areas.</p> <p>By enhancing productivity, we will be able to produce volumes that either meet or exceed our production and cost targets. This, in turn, will strengthen our business while producing below target could destabilise our business.</p>
3 Organic growth opportunities Related risks: 4 and 5	<p>As a mining company, maintaining a pipeline of resources and reserves is vital to ensuring sustained future production.</p> <p>Growing the quality of ounces produced is an imperative in achieving our strategic objectives.</p> <p>Quality organic growth opportunities are being explored and studied by management. Among other projects, this includes the Great Noligwa and Zaaiplaats studies, the Hidden Valley extension opportunity, expansions of the tailings retreatment operations and the Kalgold exploration programme. For further detail, refer to the <i>Exploration and projects</i>.</p>
4 New technology Related risks: 1, 3 and 9	<p>New technology presents opportunities to enhance our competitive advantage and ensure our business model is more resilient. For example, we can use new technology to improve our cost efficiency in response to cost pressures, such as increases in electricity tariffs and labour costs. This, in turn, will boost profitability, and help with achieving our strategic objectives.</p>
5 Mergers/acquisitions Related risks: 3, 4 and 5	<p>Merging and acquiring operations, which have synergies with our existing assets, will enable us to take advantage of economies of scale, reduce costs and improve efficiencies. This would also contribute to our medium- to long-term strategy to grow the quality of our production.</p>
6 Hedging strategy Related risks: 2	<p>The hedging of a percentage of our production to take advantage of volatile commodity and currency markets provide opportunities to lock-in attractive margins for the business.</p>
7 Moving Wafi-Golpu up the value curve Related risk: 5	<p>Permitting of the Wafi-Golpu project is well advanced. Supporting documents for the special mining lease were submitted in March 2018 and the Environmental Impact Statement was submitted in June 2018. Granting of the special mining lease is expected by the end of FY19. Permitting will provide fiscal and regulatory certainty which will move Wafi-Golpu up the value curve.</p>

STAKEHOLDER ENGAGEMENT AND OUR MATERIAL ISSUES



The process to determine our material issues derives from stakeholder engagement and our risk management process.

While our relationships with our stakeholders underpin all that we do, stakeholder engagement is also integral to our risk management process. This engagement – between management and the board, and between the company and various stakeholders – ensures that we address risks appropriately.

OUR APPROACH TO STAKEHOLDER ENGAGEMENT

Our stakeholder engagement complies with relevant legislation and standards, including ISO 14001, OHSAS 18001 and ISO 9000. In particular, we take account of King IV and its recommendations regarding the importance of inclusive stakeholder engagement and stakeholders' legitimate concerns. Using our stakeholder engagement policy and strategy, we identify various stakeholders, internal and external, across our business process.

Given our many stakeholders, priority is given to those who are most likely to have the greatest impact on Harmony in terms of achieving our strategic objectives and our business performance.

The primary aim of our stakeholder engagement is to share and gather information to inform our business decisions. This two-way communication is guided by our values and our strategic intent:

- To improve the lives of host communities through appropriate programmes or projects
- To 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
- To find a balance between the expectations of shareholders and those of other stakeholders

Our engagement with stakeholders is inclusive, so that it 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

WHY STAKEHOLDER ENGAGEMENT IS IMPORTANT

Stakeholder engagement is integral to our business and shapes 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. The board's social and ethics committee oversees stakeholder relations while the board itself monitors relations with stakeholders.

To be a profitable, responsible and sustainable business, mutually beneficial and sustainable relationships with various stakeholders are vital to the success of our business strategy, especially in relation to our material issues. Given that our material issues are informed by stakeholder engagement, it is important to understand and meet our stakeholders' needs and expectations where possible. We engage with numerous stakeholders – individuals and organisations – on an ongoing basis.

Continuous two-way engagement with our stakeholders



EMPLOYEES AND UNIONS

Maintaining stable, peaceful labour relations is essential. The benefits of a stable, engaged workforce are many, including enhanced productivity, increased likelihood of meeting our strategic objectives, reduced safety risk, and improved health and well-being.

Related material issues:
1, 2, 3, 4 and 5



GOVERNMENT AND REGULATORS

Positive relations with governments and regulators helps to better manage the uncertainty around regulatory uncertainty and political risk. Such engagement includes reporting on compliance, in line with regulations, and on developments and/or changes at our operations and projects. We collaborate with local and district municipalities on the planning and implementation of mine community development projects.

Related material issues: 1, 4 and 5



BUSINESS PARTNERS AND SUPPLIERS

Constructive relations and partnerships with our business associates and suppliers assists with cost control and management, helping us to deliver on our strategic objectives and supporting our long-term viability. In South Africa, such engagement is also vital in helping us meet procurement targets in relation to our mining rights.

Related material issues: 2, 4 and 5



SHAREHOLDERS, INVESTORS, PROVIDERS OF CAPITAL

Regular communication with the broader investment community is aimed at managing expectations relating to our financial and operating performance and to delivery on our guidance and strategic objectives. This community is the most geographically diverse of all our stakeholders.

Related material issues:
1, 2, 3, 4 and 5



HOST COMMUNITIES

Direct community engagement is key to managing our socio-economic and environmental impacts as well as community expectations, and to ensuring public safety. Our aim is to establish partnerships with host communities, based on shared value. Subjects of community engagement include, among others, employment and procurement opportunities, enterprise development, mine community development and illegal mining.

Related material issues: 4 and 5



INDUSTRY BODIES

Liaison with relevant industry bodies in South Africa and Papua New Guinea helps to promote partnerships to address material issues that are common to the industry as a whole, such as regulatory concerns relating to the Mining Charter, the impending carbon tax, industry-wide labour relations and wage negotiations, illegal mining and the silicosis settlement.

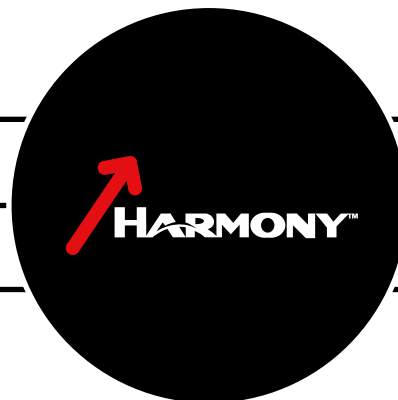
Related material issues: 1, 3 and 4



MEDIA AND GENERAL PUBLIC

Engagement with the media and general public supplements and reinforces that with other stakeholders. It helps in managing stakeholder expectations and our reputation, in forming public opinion and in promoting an understanding of our activities.

Related material issues:
1, 2, 3, 4 and 5



STAKEHOLDER ENGAGEMENT AND OUR MATERIAL ISSUES CONTINUED

MATERIAL ISSUES



Relevant GRI indicators: G4-19, G4-20 and G4-21

In the course of engaging with stakeholders, we identify those issues that are most closely related to our values and strategy. From this process, we have derived the following five material issues, which encompass our key risks and address our values – safety, accountability, achievement, connectedness and honesty.

ADDRESSING OUR MATERIAL ISSUES

1 KEEPING OUR PEOPLE SAFE AND HEALTHY

People are central to our business. While we have made significant progress in recent years, ensuring employee safety and health remain priorities.

We continue our proactive people-centric risk-based approach to safety, focusing on training and communication to entrench safe behaviour in the workplace. We understand the need to make additional safety advances by applying new technology and/or advancing protective equipment.

Our employees may face occupational health risks in working underground. We address all operational health risks and offer treatment for a variety of other health concerns. We believe that prevention is better than cure and offer proactive, integrated and holistic health programmes. Our aim is to ensure our employees return home safely and in good health. For more, see the *Safety and health* section of this report.

Our response

- Ensuring that high-risk health and safety exposures are managed
- Leading by example
- Creating an enabling environment for continuous safety improvement
- Promoting engagement aimed at enhancing safety in the workplace and employee health
- Encouraging employees to withdraw from their workplace when they consider working conditions to be unsafe
- Implementing proactive safety awareness campaigns aimed at improving safety performance
- Proactive healthcare programmes implemented, including health hubs

See *Safety and health*

Stakeholder



2 ACHIEVING OUR BUSINESS OBJECTIVES

While success in achieving our business objectives drives what we do, we are not focused solely on short-term success. As explained in *Our strategy*, our aim is to ensure Harmony is viable for years to come. As a result, we also consider our future objectives, the use of technology and innovation, diversifying our resource base, and ensuring we have projects in place to sustain and grow our production, while still applying effective financial capital allocation criteria and processes.

Our response

- Communicating progress made in achieving our objectives and on impacts of changes in the gold price and the rand/US dollar exchange rate
- Implementing initiatives to contain costs
- Implementing an appropriate hedging strategy to lock in cash margin certainty
- Engaging with suppliers to ensure cost increases are contained and reasonable
- Liaising with the Papua New Guinea government around Wafi-Golpu, and application for the special mining lease and related approvals and permits
- Acquisition of Moab Khotson, a high-grade, low unit cost operation

This is discussed throughout this report, and, in particular, in the *Chief executive officer's review* and *Operational performance*

Stakeholder



3 MAINTAINING STABILITY IN OUR WORKFORCE

A stable workforce contributes to our aim of meeting our business objectives, as it results in lower employee turnover and stabilises production. We focus on having positive and open relationships with our employees and labour unions. 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. The benefits of meeting our business objectives are shared with employees through production bonuses, and reward and recognition programmes. For more on these, see [Remuneration Report](#).

Our response

- Proactive, regular engagement based on openness, honesty and integrity
- Constructive engagement to facilitate understanding of issues and concerns of both sides
- Commitment to resolving the issues and addressing concerns
- Maintaining and upholding the principles of fairness and equity
- Promoting personalised development and training to empower individuals to contribute to Harmony and society

See [Employees and communities](#)

Stakeholder



4 MAINTAINING OUR LICENCE TO OPERATE

To be successful, we must earn and retain our right to mine. This requires a clear understanding of local legislation and regulations, as well as having solid relations with government, communities, industry bodies and local business partners. We seek more than compliance: we will continue to transform our workforce, ensure good corporate governance, and be a responsible corporate citizen. For more on this, see [Mining Charter compliance scorecard](#).

Our response

- Proactive engagement on the state of our business
- Proactively engaging to promote alignment of expectations and to understand communities' needs to enable us to make a positive, sustainable contribution
- Communication on compliance targets achieved and challenges encountered, particularly those relating to housing
- Engaging on proposed amendments to the Mining Charter and the Mineral and Petroleum Resources Development Act
- Engaging with suppliers to ensure that their processes are aligned with our human rights and environmental standards, code of conduct and empowerment requirements
- Complying with all relevant laws and regulations including those relating to the environment

See [Employees engagement](#) and [Socio-economic development](#).

Stakeholder



5 MANAGING OUR IMPACTS

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 section [Employees engagement](#) and [Socio-economic development](#).

Our response

- Developing and implementing initiatives to empower local communities to ensure sustainable economic activity once mining has ceased
- Inclusive engagement relating to land rehabilitation in the Free State and the creation of sustainable of economic activities independent of mining
- Optimising our use of materials and natural resources and minimising waste and emissions

See [Safety and health](#), [Employee engagement](#), [Socio-economic development](#) and [Environmental performance](#) in this report

Stakeholder



Stakeholders

	Government and regulators (national and provincial government, municipalities and, in particular, the Parliamentary Portfolio Committee on Mineral Resources)
	Industry bodies, such as the Minerals Council South Africa and the Chamber of Mines in Papua New Guinea
	Employees and unions
	Shareholders, investors, providers of capital
	Business partners and suppliers
	Media and general public
	Host communities

SOCIAL AND ETHICS COMMITTEE: CHAIRMAN'S REPORT



"Our commitment to sustainable development and all that it encompasses is a moral responsibility that is underpinned by our values and integrated into our business as we strive to create shared value."

Dr Simo Lushaba
Chairman: social and ethics committee

Dear Stakeholder

In the past five years, Harmony has focused on embedding the principles of sustainable development into our business strategy and our decision-making with the understanding that, while corporate citizenship is a moral responsibility and a condition of our mining licences, this duty rests on the inextricable link between profitability and sustainability. As such, we have concentrated on strengthening our culture and values, and Harmony's leadership approach, with standardised processes and definitions, such as ISO systems and environment and safety standards.

Guided by our vision of sustainable development, we strive to enable and empower our stakeholders. In so doing, we have recorded several, notable successes in the past year. For our employees, this includes our proactive healthcare programme, our improved safety strategy and the share ownership plan. To meet the needs of communities, we have established local socio-economic projects in South Africa and Papua New Guinea. Environmentally, we have reduced our carbon emissions, initiated pioneering rehabilitation processes and linked our Papua New Guinea operations to hydropower.

To add impetus, we have applied the principles of King IV with greater emphasis on ethical governance and conduct, and responsible corporate citizenship. As a result, the role of the social and ethics committee has become even more significant – more so with the creation of investment stewardship programmes by some of the world's

largest fund managers. These stewardship programmes, which monitor and support the sustainable long-term growth of the companies in which they are invested, aim to facilitate an understanding of company management and the role of environmental, social and governance (ESG) considerations in their business strategies and overall performance.

As a company in which such fund managers invest, it is important that Harmony is and is seen to be financially sustainable in the longer term. To ensure this longevity, it is vital that we deliver not only in terms of financial performance but also in making a positive, long-term contribution to society. Although, as a mining company, our main business is the exploitation of a finite resource, we are committed to sustainability in the long term. We must deliver on our social, environmental and economic responsibilities in the interests of leaving a lasting, positive legacy for host communities, employees and other stakeholders.

Harmony's social and ethics committee is responsible for overseeing governance and our performance in relation to our sustainable development activities. These activities include, among others, stakeholder engagement; employee relations, including empowerment, transformation, safety and health; environmental management and stewardship; socio-economic development and upliftment; and public health and safety.

The social and ethics committee is confident that, over the past financial year, it complied fully with the legal, regulatory

and other responsibilities assigned to it by the board. For further details on the committee, its members and activities in the past financial year, refer to *Corporate governance*.

CONTEXT AND APPROACH

Harmony's approach to sustainable development and our sustainable development framework is aligned with our values, which are central to all that we do. They guide our decision-making and our approach to sustainable socio-economic investment. We aim to create value over the economic lives of our mines and beyond by leaving a lasting, positive legacy. Our approach is allied to our commitment to the Sustainable Development Goals, introduced under the auspices of the United Nations (UN) in September 2015. These goals, endorsed by the GRI and the UN Global Compact, among others, are aimed at ending poverty, protecting the planet and ensuring prosperity for all.

Our sustainable development framework also recognises the principles articulated by the International Council on Mining and Metals, which promotes the 10 governing principles expressed in our various sustainable development policies and position statements.

Additionally, in the South African context, our sustainable development initiatives and the formulation of local economic development projects are aligned with and take into account the National Development Plan. It is important that the broader socio-economic concerns of our stakeholders are considered in delivery of sustainable development initiatives. To this end, we support government initiatives to create sustainable, diversified post-mining economies in our host communities and thus alleviate poverty by creating jobs as a national imperative. We therefore focus on the development of critical infrastructure, human settlements, development of viable alternative economic activity, education and community skills training, and the promotion of local procurement and enterprise development. Our sustainable development policy affirms our commitment to being a responsible, relevant and resilient partner in the areas in which we operate.

Our overriding aim is to uphold fair and just labour practices and conditions of service; frequent, in-depth engagement

with employees and communities; and focused and sustainable supplier development and environmental stewardship. In addition, we strive to promote a culture that values corporate citizenship, human rights, and ethical and accountable leadership. Together with effective risk management, this underpins sustained growth in our business and ultimately greater shareholder value.

In the coming five years, we plan to build on the systems and processes we have embedded and move towards building a positive legacy in the communities in which we operate.

Stakeholder engagement

Stakeholder engagement and its effective management have become increasingly important as public expectations of the corporate sector, in particular mining companies, grow. Meaningful stakeholder engagement should be frequent, inclusive, productive and based on trust. Integrity is the foundation of effective and meaningful stakeholder engagement. Establishing relationships based on trust, honesty and transparency takes time and effort, and should be reflected in our internal relationships and business activities. However, with growing community discontent with government service delivery and increasing levels of poverty, communities are turning to corporates with heightened needs and expectations. It's a delicate situation with challenges being brought to bear on these relationships. These expectations must be tempered while maintaining trust, and oftentimes, this results in dissension and disruptive behaviour. Through all of this, we respond with respect for the human rights of our employees, communities, suppliers and business partners. We are then better equipped to maintain our social licence to operate and ensure the sustainability of our business. For more information, see *Stakeholder engagement and material issues*.

Building a healthy, safe and engaged workforce

A healthy workforce and workplace translate directly into improved productivity and, at Harmony, we strive to create an enabling environment to promote employee health and wellbeing. Proactive healthcare remains the key tenet of our programme and in FY18 we advanced this by promoting awareness of the importance of health, prevention and treatment, and

continuous health risk profiling. Our focus remains the management of tuberculosis, HIV/Aids, as well as on occupational health concerns relating to dust (silicosis in particular), heat, noise and radiation.

Much work has been done in a collaborative gold mining industry effort in South Africa to address the silicosis legacy and to establish a sustainable, all-inclusive and comprehensive solution for the compensation of occupational lung diseases covered by the Occupational Diseases in Mines and Works Act. A settlement of the silicosis class action has been reached (subject to court ratification) and, through the Ku-Riha and RECONNECT projects, the Department of Health has compensated 8 795 people to the value of R168 million.

In terms of operational and employee safety, our performance and regulatory compliance are monitored by the technical committee. I refer you to *Safety and health* in this report.

Trust, consultation and collaboration are the cornerstones of our relationship with employees, both directly and through organised labour. We have experienced stable labour relations in South Africa and Papua New Guinea in recent years. In South Africa, the 2018 wage negotiations in the gold mining sector were completed post year end. For further information on employee relations and the wage negotiations, see *Employee engagement*.

Community empowerment and transformation

Our moral obligation to host communities extends beyond providing direct employment opportunities and financial benefits. We drive socio-economic sustainability through local economic development programmes, and by supporting and developing local procurement and business opportunities, including infrastructure, education and skills development, job creation and entrepreneurship. Much of this is done in terms of our social and labour plans and corporate social investment programmes. In FY18 we invested R20m in local economic development. For details on work in communities in the past year, see *Socio-economic development*.

In addition, we monitor and manage our activities to limit community exposure to any potential health hazards. Our aim is to ensure the well-being of host communities.

Environmental and material management and stewardship

Responsible management of our environmental impact and our consumption of finite resources remain high on our list of priorities. Given the prevailing water scarcity in South Africa, reducing the rate of water consumption is vital. We also continue to drive energy conservation and efficiency, which resulted in a 3% reduction in electricity consumption and a 2% decrease in carbon emissions, thanks to innovative solutions.

Harmony has featured in the A list of the Carbon Disclosure Project's Water programme for three consecutive years and in the A list of the Climate Change programme for five years since 2013.

THE YEAR AHEAD

In September 2018, Mining Charter III was gazetted by the Minister of Mineral Resources, the Honourable Gwede Mantashe.

Harmony remains committed to the sustainable transformation of the mining industry but is also of the view that this can only be achieved through open negotiations, based on trust, between the industry and the regulators. We look forward to continued participation in discussions with the Minister and the Department of Mineral Resources.

THANKS

This is my first report as chairman of the social and ethics committee. In an effort to ensure that the board and its committees remain refreshed, I was appointed chairman of the committee during the course of this year. Modise Motloba remains a committee member, and I want to thank him and my fellow committee members for their support and contribution to ensuring Harmony's progress towards a sustainable future, and to ensuring that we comply with the best safety, health, environmental, social and governance standards. In this, the committee has the full support of our board.

Dr Simo Lushaba

Chairman: social and ethics committee
25 October 2018

OUR SUSTAINABLE DEVELOPMENT FRAMEWORK

We have embedded sustainable development practices into our business strategy and decision making, understanding that while corporate citizenship is both a moral responsibility and a condition of our mining licences, this duty rests on the inextricable link between profitability and sustainability.

Our sustainable development framework takes into account the 10 principles advocated by the International Council of Minerals and Metal (ICMM), which serve as a best-practice framework for sustainable development in the mining and metals industry. We have also taken into account the United Nations Global Compact and Sustainable Development Goals.

Sustainable development principles are woven into our organisational business processes and practices. We have incorporated the necessary standards and systems, including the relevant ISO systems, developed group standards for environment and safety, and standardised processes and definitions, embedding these in our culture and values, and in our approach to leadership.

Guided by our vision for sustainable development, we have recorded several notable successes in recent years:

- For society, these include:
 - Proactive healthcare, improved safety strategy, employee share ownership and value creation for communities in South Africa and Papua New Guinea
- For the environment, these include:
 - Reduced carbon emissions, launch of pioneering rehabilitation processes, and the use of hydropower at our Papua New Guinea operations

SUSTAINABLE DEVELOPMENT GOVERNANCE AND MANAGEMENT

01 CORPORATE POLICY

The social and ethics committee oversees policies and strategies pertaining to public safety, occupational health, environmental management, employee health and wellbeing, corporate social responsibility, human resources and ethics

02 GUIDELINES AND STANDARDS

Discipline-specific policies are supported by guidelines and standards which inform the development of site-specific management systems

03 OPERATING MANAGEMENT

Responsibility for policy implementation vests with the management team and the various discipline executives



Harmony included in the FTSE4Good Index Series

FTSE Russell (the trading name of FTSE International Limited and Frank Russell Company) confirms that Harmony has been independently assessed according to the FTSE4Good criteria, and has satisfied the requirements to become a constituent of the FTSE4Good Index Series. Created by the global index provider FTSE Russell, the FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong Environmental, Social and Governance (ESG) practices. The FTSE4Good indices are used by a wide variety of market participants to create and assess responsible investment funds and other products.

HARMONY'S ACTIVITIES IN RELATION TO EACH OF THE SUSTAINABLE DEVELOPMENT GOALS*

1 NO POVERTY

- Employing 40 686 people
- Socio-economic development initiatives

4 QUALITY EDUCATION

- Bursary programme for employees and local communities

7 AFFORDABLE AND CLEAN ENERGY

- Renewable energy procurement programme
- Bio-energy build programme

10 REDUCE INEQUALITIES

- Gender diversity policy and employment equity policy and strategy
- Employment opportunities for local communities in South Africa and Papua New Guinea

13 CLIMATE ACTION

- Energy conservation and renewable energy programme

16 PEACE, JUSTICE AND STRONG INSTITUTIONS

- Partnerships with labour, regulators and host communities

2 ZERO HUNGER

- Land rehabilitation and food security initiatives

5 GENDER EQUALITY

- Employment equity strategy and targets
- Women in mining programme
- Focus on women in our procurement programmes

8 DECENT WORK AND ECONOMIC GROWTH

- Conditions of employment
- Financial literacy programme

11 SUSTAINABLE CITIES AND COMMUNITIES

- Socio-economic development plans

14 LIFE BELOW WATER

- Zero discharge aspiration
- Careful risk management and in-depth scientific research in relation to the proposed deep sea tailings placement solution for the Wafi-Golpu project

17 PARTNERSHIPS FOR THE GOALS

- Partnerships with governmental institutions and communities in South Africa and Papua New Guinea that support our sustainable development imperatives

3 GOOD HEALTH AND WELL-BEING

- Proactive employee healthcare strategy
- Community healthcare initiatives

6 CLEAN WATER AND SANITATION

- Water conservation programme

9 INDUSTRY, INNOVATION, INFRASTRUCTURE

- Supporting the Minerals Council's research and development initiatives
- Sponsorship of chair in rock engineering at the University of Pretoria

12 RESPONSIBLE CONSUMPTION, PRODUCTION

- Water and energy conservation programme
- Cyanide management
- Land rehabilitation

15 LIFE ON LAND

- Environmental conservation
- Rehabilitation programme

THE WAY FORWARD

In the coming five years, we will build on the sustainable development systems and processes already embedded as we move to establish a lasting legacy. Our focus will be on aligning our socio-economic and environmental obligations with the United Nations Sustainable Development Goals.

Given that Harmony's business is changing, and we become more of a global player with world-class assets, this should be reflected in our responsibilities and sustainable development practices. This reinforces the need for us to build on our reputation which is becoming vital to our business. One approach is to heighten our credibility through our sustainable development performance and reporting.

In aiming for continuous improvement, we have 15 significant and material indicators assured annually, certain of which are audited at a level of reasonable assurance. We continue to advance our assurance programme in coverage of key indicators and levels of assurance. See the *Assurance Report* in this integrated report.

* The 17 Sustainable Development Goals, which came into effect in January 2016, were developed to support the United Nations 2030 Agenda which has as its goals:

- ending poverty and inequality
- protecting the planet
- ensuring that all people enjoy peace and prosperity

In South Africa, these 17 goals are driven through the National Development Plan.



SAFETY AND HEALTH



As the safety and the health of our employees is paramount, we recognise that more needs to be done to ensure a safe workplace for all employees.



REFLECTING ON



FY18

- Sadly, 13 colleagues lost their lives in FY18. Previously, Harmony had demonstrated an improved and consistent downward trend in the number of fall-of-ground incidents
- Roll-out and training of our safety risk management programme continued and will be completed in FY19
- Group lost-time injury frequency rate improved by 13% to 6.26 from 7.21 per million hours worked
- Hidden Valley project was delivered safely, with no fatalities or lost-time injuries
- Doornkop mine achieved its first ever three million fatality-free shifts during the year

OUR APPROACH TO SAFETY AND HEALTH

At Harmony, we care for the safety and health of our employees. Employee wellbeing and ensuring a safe workplace are priorities. Through active leadership, a proactive culture and effective critical control management, we will prevent significant unwanted events and fatal incidents – and *Live Longer*.



Implementation of a comprehensive integrated safety risk management system and the accompanying safety campaign – **Live Longer** – began in FY17. This system was developed following an exercise to benchmark best practice in the industry, and an external audit by DuPont of our safety performance and practice. *Live Longer* is a risk-based approach to safeguarding lives. This approach is not limited to safety. It also encompasses health, the environment, communities and social risks, legal and regulatory risks, among others.

Our occupational safety and health policy and related management framework are aligned with the Mine Health and Safety Act in South Africa and relevant legislation in Papua New Guinea, including the Mining (Safety) Act and associated regulations. We also adhere to and apply the standards and aims prescribed by the International Council on Mining and Metals. Our approach to safety encompasses critical control management, preparedness, prevention and the monitoring, review and analysis of relevant safety and health data indicators.

Representatives of management, unions and government participate in structures aimed at emphasising the importance of safety and achieving our goal of zero harm.

At our South African operations, operational safety and health committees ensure that all employees are involved in managing and ensuring the safety of all.

Currently, we have 45 full-time safety and health stewards at our South African operations (FY17: 33). Safety and health feature as agenda items at all union and management engagements.

At board level, the technical committee is responsible for approving and monitoring compliance with our safety and health policy, and with legislation. Safety, a key performance indicator for management, is monitored to determine remuneration in terms of safety performance.

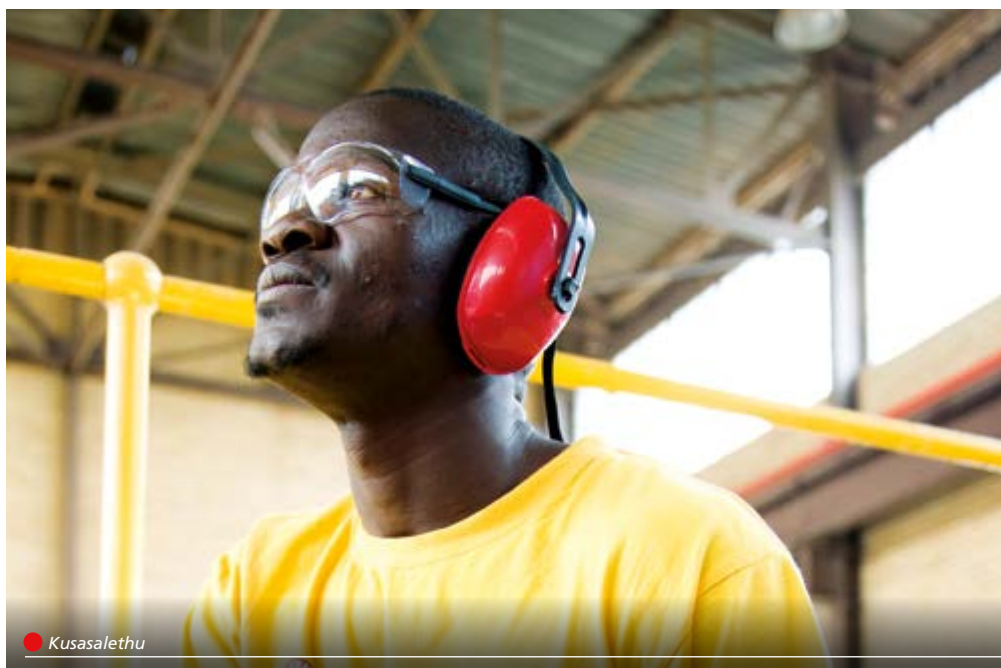
In Papua New Guinea, safety managers report regularly to the South-east Asia executive committee by way of notifications, formal monthly reports and meetings. This committee in turn reports to Harmony's technical committee and the board.

SAFETY

Harmony's approach to safety risk management, together with visible felt leadership and our values, underpin our determination to achieve zero harm. A co-operative approach, involving all stakeholders, ensures that the necessary infrastructure and systems are in place – including relevant planning, communication and training. We encourage employees to stop working when a workplace is considered unsafe and/or to prevent unsafe actions. Safe behaviour is constantly reinforced.

The overall aims of our safety risk management are to:

- proactively manage safety risks
- establish in-house capabilities to ensure that safety risk management is a way of life
- promote a culture of continuous learning
- prevent accidents, especially significant unwanted events, before they happen by implementing the controls necessary to effectively manage potential hazards



Key aspects of our safety approach:

Prevent fatalities	Active leadership and proactive culture	Embedding our safety culture	Implementing systems to improve risk management
<p>Risk management has to be a way of life</p> <p>Focus on critical control management (as per International Council on Mining and Metals guidelines)</p> <p>Routine tasks:</p> <ul style="list-style-type: none"> • SLAM (Stop, Look, Assess, Manage) • Safety declaration • Permit to work and pre-start up checks <p>Non-routine tasks: issues-based risk assessment, trigger action response plan</p>	<p>Promoting a proactive culture to prevent incidents</p> <p>Creating an enabling environment for our teams to deliver safely and productively</p> <p>Asset management focused on:</p> <ul style="list-style-type: none"> • Infrastructure and equipment integrity • Moving towards engineered controls 	<p>Employee engagement, safety awareness and training</p> <p>Engaged workforce committed to compliance</p> <p>Leadership development</p> <p>Positive behaviour reinforcement</p>	<p>Systems implemented to improve monitoring and analysis of critical controls and safety compliance</p> <p>"Learning from incidents" to drive continuous improvement</p> <p>Review control effectiveness through an enhanced second level audit process</p>

Our safety approach is underpinned by living our values – genuinely caring for safety, health and the environment

SAFETY AND HEALTH CONTINUED

At our underground operations in South Africa, eight fatal risks – falls of ground, underground rail-bound equipment, electricity, working at heights, winches, mud rushes and inundation, fire and explosives – have been identified. For each, risk standards with critical controls have been compiled and rolled out together with the necessary training.

Phase 1 of the rollout of our safety risk management approach at all operations will be completed by the end of calendar 2018. Phase 2 of the system's rollout is being conducted and group-wide implementation is scheduled to be completed during FY19.

Phase 3 will involve embedding the monitoring of controls and responses to control failures, together with a process to continually improve control efficacy.

Harmony is involved and contributes to external safety initiatives and leading practices in the mining industry for implementation through the Mining Industry Occupational Safety and Health's (MOSH) Community of Practice Adoption (COPA) process. Champions are nominated for each aspect of occupational safety and health. They attend industry meetings and ensure that relevant information is disseminated to the operations.

PERFORMANCE FY18

Relevant GRI indicators: G4-LA5, G4-LA6 and G4-LA8

Regrettably, there were 13 fatalities during the year (FY17: 5) at our South African operations. There were no fatalities for the second consecutive year at Hidden Valley in Papua New Guinea.

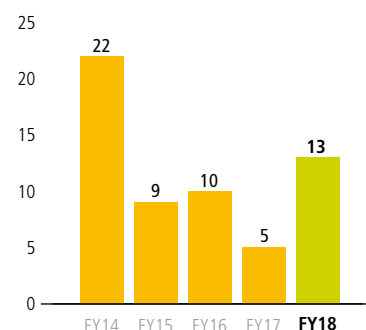
Harmony continues to provide counselling and financial assistance to the families of deceased employees. An education fund established in FY14 supports the needs of school-going dependants of all employees and contractors who lose their lives in the workplace.

Following the tragic Kusasalethu accident, an in-depth investigation was conducted by Harmony and the Department of Mineral Resources. Existing procedures and processes were reviewed and the following actions, among others, were undertaken:

- Rock engineering audits that included macro and micro audits with actions and outcomes closed out by line management
- Refresher training of managers and line management on seismically active mines
- Investment in further research and tests to ensure adequacy of support systems

The increase in fall-of-ground related incidents across the mining industry has led to an investigation into new leading safety practices related to ledging and drilling and blasting by an industry safety task team.

Group: Number of fatalities



South Africa

The lost-time injury frequency rate for the South African operations improved by 12% to 6.67 per million hours worked (FY17: 7.61) and the reportable injury frequency rate by 7% to 4.18 per million hours worked (FY17: 4.49). A total of 23 780 shifts were lost due to occupational injury (FY17: 24 026). The fall-of-ground injury frequency rate improved to 1.41 (FY17: 1.55). There were three gravity-related fall-of-ground fatalities (FY17: 1) and seven seismicity-related fall-of-ground fatalities (FY17: 0). The rail-bound equipment injury frequency rate regressed to 0.59 (FY17: 0.43). No rail-bound equipment-related fatalities were recorded during the year.

In response to the prior year's assurance qualification of the lost-time injury frequency rate, which related to certain inconsistencies in the reporting of hours worked, Harmony implemented standardised and automated computer-based systems in FY18 to improve the safety data management process and reporting of hours worked in determining key safety statistics.

In memoriam

Date	Operation	Name	Occupation	Cause
25 July 2017	Target	Saraseng Elias Moloko	Engineering team leader	Pressure vessel related
25 August 2017	Kusasalethu	Mohlomi Mokhele	Stope team member	Seismicity-related fall of ground
		Motshewa Matuba	Stope team member	
		Relebohile Mokemane	Stope team member	
		Mohlabane Moganedi	Rock drill operator	
		Moss Setlhafuno	Rock drill operator	
8 November 2017	Masimong	Fusi Khalikana	Rock drill operator	Gravity-related fall of ground
5 December 2017	Tshepong	Moelwa Emily Lethebe	Miner's assistant	Gravity-related fall of ground
17 January 2018	Tshepong	Nyanisile Jacwana	Miner's assistant	Tools, machinery and equipment
27 March 2018	Joel	Molatudi Mafereka	General logistic worker	Seismicity-related fall of ground
		Ephraim Leholoo	Crew supervisor	
17 May 2018	Moab Khotsong	Thembile Tsutsu	Locomotive operator	Working at height
8 June 2018	Bambanani	Kabelo Lebetsa	Rock drill operator	Gravity-related fall of ground

The number of Section 54/55 instructions issued during FY18 decreased to 242 (FY17: 276) with production of 530kg (18 550oz) (FY17: 291kg; 10 185oz) being lost as a result of safety-related stoppages.

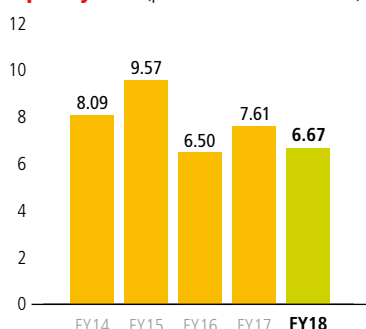
The fatal injury frequency rate for the South African operations regressed from 0.07 for FY17 to 0.17 per million hours worked for FY18.

FY18 safety achievements

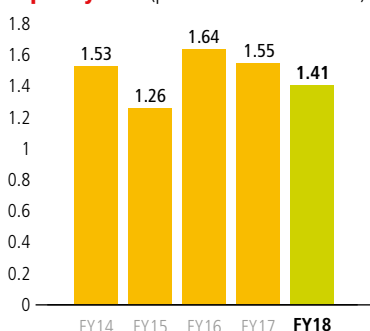
Fatality-free performance		Significant safety performance	
More than 3 million shifts	South Africa operations (rail bound equipment): 14 million shifts	More than three years	Joel Plant: seven years' lost time and reportable injury free
	Target (rail-bound equipment): 8 million shifts		Education, Training and Development Services: eight years' lost time and reportable injury free
	Tshepong (rail-bound equipment): 4 million shifts		Saaiplaas Plant: 11 years' reportable injury free
	Unisel (fall-of-ground): 4 million shifts		
	Doornkop (rail-bound equipment): 4 million shifts		
	Moab Khotsong (fall-of-ground): 4 million shifts		
3 million shifts	South Africa operations (including fall-of-ground)	Three years	Doornkop: fatality free
	Doornkop (including fall-of-ground)		Harmony One PLANT: reportable injury free
	Joel (fall-of-ground)		Free State Laboratory: reportable injury free
	Unisel (rail-bound equipment)		
	Kusasaletu (rail-bound equipment)		
2 million shifts	Tshepong Operations (including fall-of-ground)	Two years	Doornkop Plant: lost time and reportable injury free
	Phakisa (fall-of-ground)		
	Masimong (rail-bound equipment)		
1 million shifts	Phakisa (including rail-bound equipment)	One year	Kalgold: lost-time injury free
	South Africa underground operations	White flag year (injury free)	Harmony One Plant
	South Africa surface operations		Central Plant
	Masimong (fall-of-ground)		Saaiplaas Plant
	Target (fall-of-ground)		Free State Commercial Services & Transport
			Nufcor Plant
	Free State Surface Operations		
			Central Plant
		Rail-bound equipment injury-free year	Target
MineSAFE awards			
Safety improvement (year on year total injury and accident frequency rate improvement)			
Underground operations	Unisel: 3rd place	Process plants	Saaiplaas: 1st place
	Target: 2nd place		
Best in class (lowest progressive total injury frequency rate)			
Underground operations	Asset Management Forum: 3rd place	Process plants	Saaiplaas: 1st place
	Bambanani: 2nd place		

SAFETY AND HEALTH CONTINUED

South Africa: Lost-time injury frequency rate (per million hours worked)



South Africa: Fall-of-ground injury frequency rate (per million hours worked)



Managing seismicity

Seismicity at our mines is monitored and managed continuously. Some of our underground mines experience higher levels of seismic activity, and have in place support systems and procedures focused on energy absorption.

A number of methods are used to prevent and control seismicity and its consequences:

- Routine seismic monitoring systems are in operation at all our mines in South Africa. These systems monitor all mining-related seismicity. The data generated is used to quantify exposure to seismicity, to warn of potential instabilities and to aid mine planning and design
- Short-term seismic hazard assessments of each mining panel are conducted daily. Depending on the seismic hazard rating of a workplace, mining crews are withdrawn
- Monthly planning process limits the mining rates in high-risk areas and manages the design of mine stope faces
- Long-term planning addresses placement of development excavations in the footwall and in vicinity of other excavations

- Long-term mining sequence is addressed in yearly life-of-mine planning and technical sessions
- On mines where the hazard of face strain bursts is present, pre-conditioning of the stope face is applied
- Rapid yielding hydraulic props are used on certain seismically active mines to cater for the high velocity of closure expected during rockbursts
- On certain seismically-active mines, backfill is used as both a regional and local support. This assists in reducing volumetric convergence and high stresses on the face as well as in maintaining the integrity of fractured rock in the stope face and gully regions
- Support units are specially selected to cater for rockfall conditions and dynamic loading in seismically-active areas
- Secondary support is installed in selected areas to manage changes in stress and expected shakedown during seismicity
- Flooding of mines also influences seismicity. Water levels in neighbouring mines and in the zone of influence are, therefore, monitored and managed where possible
- As the majority of seismic events occur during blasting activities, centralised blast systems are used at most seismically active mines to minimise the seismic hazard to which the workforce is exposed

In the interest of a safer working environment in deep-level hard-rock mines, Harmony contributes to fundamental research programmes conducted by the University of Pretoria and the Institute of Mine Seismology into specific rock engineering and seismological issues.

Papua New Guinea

Hidden Valley recorded no fatalities or lost-time injuries for the year. The lost-time injury frequency rate improved from 0.52 to 0. In all, no shifts were lost due to occupational injury at Hidden Valley (FY17: 0). Encouraged by this performance in FY18, we will continue to focus on risk management and critical controls, visible felt leadership and promoting a proactive safety culture.

Work continues to integrate, update and improve Harmony's Hidden Valley and Exploration's safety management system.

The revised or updated system will align with the risk management safety approach rolled out at the South African operations, Australian standard 4801 and the ISO 45001 (once ratified).

Safety measures in place include implementation of critical controls and verification of all high-risk (potentially fatal) activities. Work menus and related training programmes, incorporating relevant critical controls, were developed for high-risk activities, rolled out and monitored.

Review of compliance with the implementation of critical controls continues to be embedded across the Hidden Valley operation. It is important in monitoring the implementation and effectiveness of controls, and identifying leading indicators.

Particular safety challenges encountered in Papua New Guinea are landslides and/or slope failures due to the mountainous terrain, high rainfall, quickly changing weather conditions and earthquakes. Natural landslides are relatively common and, together with potential man-made landslides (slope failures associated with open-pit mining), pose a significant safety risk.

Real-time slope stability radar monitoring systems, critical in monitoring and managing potential failures and failure incidents, operate at both open pits.

Specific geotechnical risk assessments are undertaken for all work sites in Papua New Guinea. The associated mitigation plans are updated at least annually.

As vehicle-related incidents are also a significant risk, we have implemented the following risk mitigation measures:

- Installation of on-board cameras to monitor driver behaviour for corrective training
- Vehicle-specific emergency braking procedure training for drivers
- Manned check points for trucks to verify permits and licences prior to entry into mine lease areas and prior to certain hazardous declines
- Reducing fatigue-related incidents and further investigations into technology to prevent accidents

HEALTH

At Harmony, we believe that every employee deserves a fulfilled life and that is why we care about their wellbeing. It is important that our employees are fit for life, fit for work and fit to retire. The healthcare approach at Harmony is proactive, risk-based and close to the operations. Healthcare or employee wellbeing can be categorised into two distinct areas: employee health and wellness, which is occupational healthcare in the workplace, and non-occupational healthcare, which is lifestyle related.

Health is a key component of achieving operational excellence. Harmony's health strategy is aligned with achieving its strategic objectives, mainly by reducing health-related safety risks, improving productivity by reducing absenteeism and offering a sustainable, cost-effective health service solution.

Prevention and managing of tuberculosis (TB), HIV/Aids and chronic diseases at all our operations, and malaria specifically in Papua New Guinea, are important focus areas.

In South Africa, Harmony's healthcare programme provides primary, secondary and tertiary healthcare as well as occupational health services to all employees, through company-managed healthcare facilities, medical aid membership, and through external healthcare providers. We continue to provide accessible, comprehensive healthcare services at our health hubs, located close to the workplace.

Harmony's proactive healthcare aims to manage illness by identifying disease early and so helping to prevent permanent disability. Medical surveillance, active case finding, and the early detection and treatment of disease are thus integral aspects of our management healthcare system. This strategy will be expanded to include monitoring and promoting employees' resistance to illness.

Harmony's proactive healthcare aims to manage illness by identifying disease early and so help to prevent permanent disability. Medical surveillance, active case finding and the early detection and treatment of disease are thus integral aspects of our management healthcare system. This strategy will be expanded to include monitoring and promoting employees' resistance to illness.

The four pillars of health services are:

- Health promotion and awareness
- Disease prevention and risk management
- Clinical intervention (treatment programmes)
- Continuous health risk profiling

PERFORMANCE IN FY18*

Relevant GRI indicator: G4-LA7

South Africa

Key health focus areas in FY18 were the optimisation of labour availability, integration and aligning of Harmony's healthcare strategy at Moab Khotsoeng (ongoing), and greater attention and awareness of psycho-social or mental health wellness.

Employee wellness and healthcare Healthcare delivery

At our South African operations, membership of a medical scheme is compulsory for all category 9+ employees. For category 4-8 employees, membership is voluntary. In all, 6 879 employees participated in medical schemes in FY18 (FY17: 6 870).

Harmony subsidised the related costs on behalf of employees by R14 million (US\$1.1 million) a month (FY17: R13 million or US\$1.0 million).

In all, 20 632 category 4-8 employees have elected not to join a medical scheme. Instead they receive comprehensive health services from mine medical health facilities and associated preferred providers at no cost to the employee. The cost of providing these services was R24 million (US\$1.9 million) a month in FY18 (FY17: R24 million; US\$2.0 million), which includes health hub management costs, specialists and hospitalisation.

The dedicated health hubs at our operations undertake active case-finding and screening as well as active disease management of chronic conditions for employees who are not members of a medical scheme. Medical surveillance is conducted at our health hubs for all employees, including contractors. In all, 46 513 medical examinations were conducted during the past financial year (FY17: 44 733).

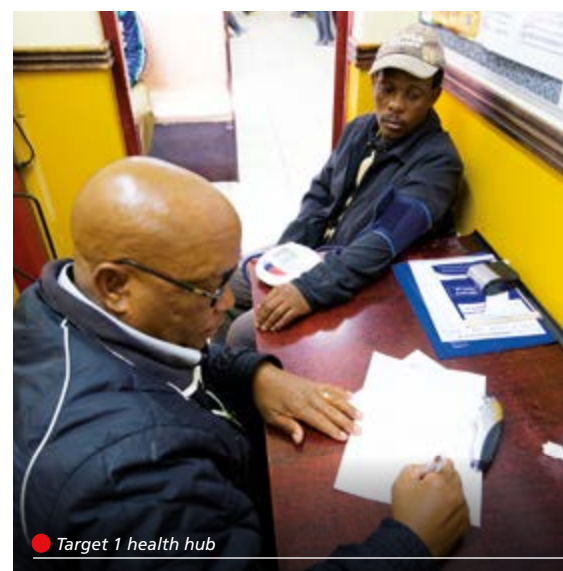
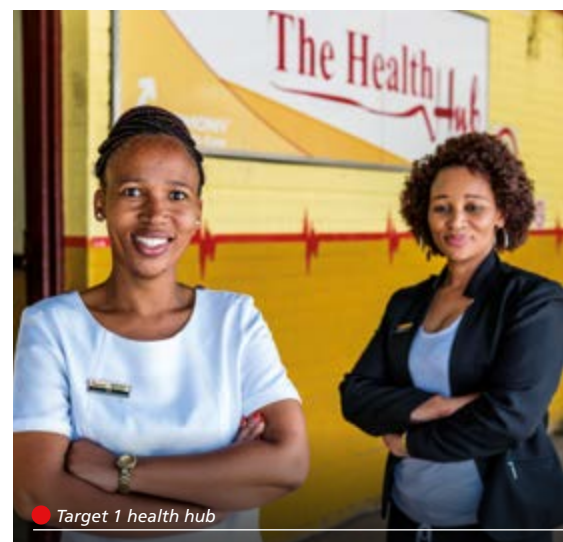
Managing health-related absenteeism

Our At work health management programme continues to yield good results by contributing to more healthy people being at work. The aim of this programme

Our efforts to improve the health and well-being of our employees and to contribute to public health are aligned with the Sustainable Development Goal 3



* All figures presented exclude Moab Khotsoeng for the four months of the financial year the operation was included in Harmony's portfolio, from 1 March 2018 to 30 June 2018.



SAFETY AND HEALTH CONTINUED



● Transport depot



● Tshepong health hub



● Kusasalethu health hub

is the early identification and care of employees who may become chronically ill, and to manage, review and monitor their medical conditions. Health-related absenteeism remained stable at 7.4% in FY18. In the past year, 8 463 (FY17: 8 109) individual medical cases were reviewed by a team of healthcare professionals.

Preventative healthcare – promoting awareness and education

Harmony's health initiatives focus on the most common diseases and, as part of the induction programme, the e-learning module addresses these diseases. In addition, podcasts and television screens are used to educate employees on various health issues. Other initiatives include the distribution of pamphlets, health-worker training, screening at all medical centres, disease management interventions and quality assurance. Furthermore, an exclusive health desk has been set up to improve and strengthen communication on health-related matters.

Monthly health awareness campaigns, guided by the annual health calendar, focus on particular health-related topics such as HIV/Aids, TB, sexually transmitted infections, and occupational and lifestyle diseases. Ongoing monitoring and education are conducted at the medical health hubs, which oversee major health campaigns at operational level.

In preparation for the winter season in South Africa, the influenza (flu) vaccine is offered to employees as a precautionary measure. In all, 8 883 employees (FY17: 9 260) received influenza vaccinations in the past financial year.

Managing diseases

Tuberculosis

TB is one of the most pressing public health concerns in South Africa and the gold mining industry. The TB incidence rate at our South African operations remains high compared with World Health Organization and national benchmarks.

Harmony's TB control programme, which is aligned with the relevant guidelines and prescriptions of the World Health Organization, and with the National Strategic Plan to combat TB, focuses on comprehensive screening, testing and contact tracing, hospitalisation of infectious cases and a directly observed therapy short course. As an affiliate of the Minerals Council South Africa, and through the national Masoyise iTB

campaign, Harmony is committed to ensuring that every employee is screened and tested for TB annually.

For FY18, 29 955 employees (including contractors), or 97% of the workforce, were screened for TB, exceeding the 90% target set by the Minister of Health. A total of 540 cases of TB were certified (FY17: 440).

The TB incidence rate per 100 000 employees has continued to decline since the introduction of our proactive healthcare strategy in FY10, improving by 22% year on year.

HIV/Aids

The HIV/Aids hyperepidemic in South Africa still continues to have a significant impact on employees and their dependants, despite significant progress made in raising awareness and prevention, and the national roll-out of antiretroviral therapy. The illness can result in higher levels of opportunistic co-infections, which lead to increased absenteeism and reduced performance levels, loss of skills, increased economic burden, and sometimes death. Motivating employees to confirm or disclose their HIV status, despite perceived stigma and confidentiality issues, remains one of the greatest challenges. Initiatives such as positive behaviour programmes are pivotal in this regard.

At our South African operations, 8 108 employees (FY17: 7 816) have been identified as being HIV-positive and are on the HIV/Aids programme, with 6 938 (FY17: 6 340) receiving antiretroviral therapy. HIV/Aids is managed through our clinics and the services of health professionals with the support of appropriate specialists. Harmony's HIV/Aids strategy is based on promoting health through education and awareness programmes, preventative strategies to reduce the number of new cases, evidence-based medical interventions and ongoing monitoring of compliance.

The Department of Health, in conjunction with the Joint United Nations Programme on HIV/Aids (UNAids), has adopted the 90-90-90 targets, which are globally aligned. Harmony has in turn aligned its HIV/Aids programme with these targets, which are:

- By 2020, 90% of all people living with HIV will know their HIV status. Harmony is currently at 82% (FY17: 78%) (including contractors)

- By 2020, 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy. Harmony is currently at 80% (FY17: 78%) (medically uninsured, excludes contractors)
- By 2020, 90% of all people receiving antiretroviral therapy will have viral suppression. Harmony is currently at 71% (medically uninsured)

Voluntary counselling and testing for HIV/Aids

Pre-test counselling and voluntary testing are offered to all employees through ongoing interventions at all Harmony healthcare hubs. In all, 32 194 (FY17: 29 991) employees received voluntary counselling and testing during the year and, of these, 26 082 (FY17: 23 162) confirmed their status.

Chronic diseases

Non-communicable chronic diseases including hypertension, heart disease and diabetes continue to pose a significant challenge for our employees.

Specific initiatives have been implemented to manage chronic diseases, with a particular focus on HIV/Aids, TB, diabetes and hypertension. In FY18, 59% (FY17: 55%) of employees at the South African operations had a chronic condition. Of the 16 247 employees diagnosed with chronic conditions, 34% have hypertension, 6% diabetes and 50% HIV/Aids.

Managing occupational health

Harmony is focused on creating an enabling environment for teams to succeed. Managing underground health hazards, including temperature, dust and noise control, is critical.

Managing underground temperatures – limiting heat stress

Extensive refrigeration and ventilation measures are in place at all operations where temperatures exceed normal working ranges. Heat-tolerance testing, acclimatisation programmes, and the provision of adequate hydration, support and protect employees exposed to excessive heat in the workplace.

In FY18, 20 797 heat-tolerance tests were conducted with 47 heat-related illness cases reported (FY17: 15 354 tests and 53 cases). Most cases can be attributed to dehydration. Environmental working conditions are monitored continuously.

Noise management – eliminating noise-induced hearing loss

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

During the year, 99% of occupationally exposed employees, including contractor employees (84%), were given personalised hearing protection devices (FY17: 99% and 76%). A progressive total of 26 913 personalised devices had been issued by the end of FY18 (FY17: 24 759).

Sound attenuators were also fitted to all equipment, resulting in no noise level exceeding 110dB(A)-weighted decibels from any machine, in compliance with our noise milestone.

Industry milestones for noise-induced hearing loss:

- By January 2018, no employee's standard threshold shift 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 107dB(A)

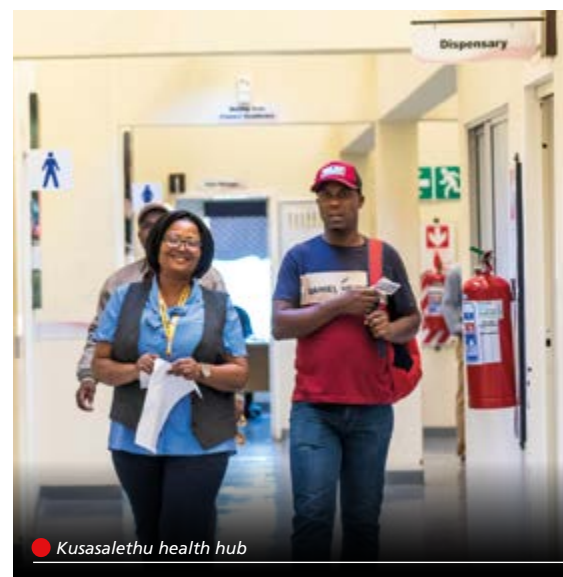
Annual audiometric testing is conducted at our occupational health hubs during medical examinations. The number of early noise-induced hearing loss cases (5-10% shift) decreased from 518 cases in FY17 to 446 in FY18.

An awareness drive was initiated at all operations 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. Compliance monitoring is undertaken during routine occupational hygiene inspections and ad hoc audits are also conducted.

As part of the initiative to prevent noise-induced hearing loss, 25 607 (FY17: 24 939) employees participated in the 'hearing coach promotion' initiative during the year. Evaluations were conducted and guidance provided where necessary regarding the use of customised hearing-protection devices.

Dust control – elimination of related occupational health diseases

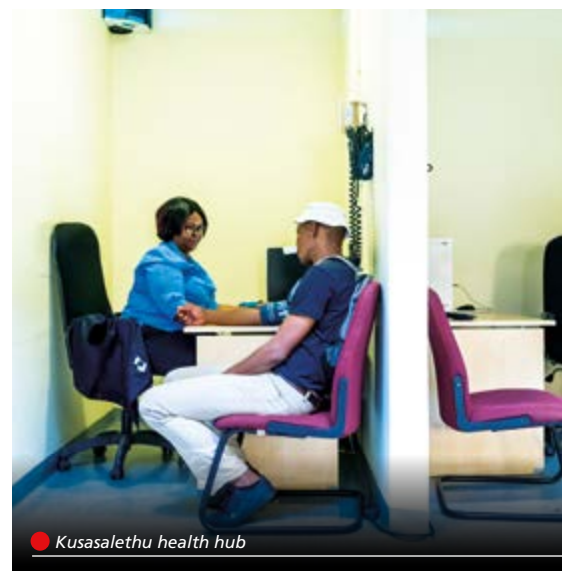
Dust discharge occurs during activities where the rock is broken at source:



● Kusasalethu health hub



● Target 1 health hub



● Kusasalethu health hub

SAFETY AND HEALTH CONTINUED

stopping, development and trackless mining. Engineering controls to allay dust have been implemented or are being rolled out at our underground operations to minimise employees' exposure to silica dust, including leading practices as advocated by the Mining Industry Occupational Safety and Health (MOSH) such as employing fogger systems at strategic underground areas and implementing foot- and side-wall treatments to allay dust in identified intake airways.

Multi-stage dust filtration systems have also been installed and all winches have been covered. In addition, real time dust monitors are installed at all our underground operations. These monitors provide immediate dust readings, which will allow immediate action to be taken on unacceptable readings.

Training and awareness programmes address dust control in stopes and all development ends are equipped with water blasts to settle dust directly after a blast.

Managing silicosis

Silicosis is caused by long-term exposure to high levels of quartz silica dust and can increase susceptibility to TB. Harmony's integrated HIV/Aids, TB and silicosis policy and programme is intended to responsibly manage the debilitating disease and proactively prevent deterioration, and so minimise the risk.

During FY18, 211 cases of silicosis were submitted to the Medical Bureau for Occupational Diseases and 179 cases were certified (FY17: 220 cases reported; 108 cases certified).

Project Ku-Riha and RECONNECT

Project Ku-Riha (Tsonga for compensation), launched by government in May 2015, is being rolled out by the Department of Health to improve the compensation system for those mineworkers who have occupational lung disease, and ensure that valid claims are paid more speedily and efficiently.

Harmony and seven other South African mining companies continue to participate in this initiative.

Aligned with the Department of Health's Project Ku-Riha, Harmony's in-house RECONNECT initiative was launched in collaboration with Teba to trace former employees and assist in addressing the backlog in claims for occupational lung disease at the Compensation Commission for Occupational Diseases.

The RECONNECT initiative began in Lesotho in May 2017, and has covered the following areas to date: Lesotho's Butha-Buthe, Qachas Nek and Maseru; Manzini in eSwati (Swaziland); Xai-Xai in Mozambique; and Pongola, Mqanduli, Vryheid, Stilfontein, Welkom and Carletonville in South Africa.

The current status of this initiative is as follows:

- Number of Harmony related claims paid and closed from Oct 2015 to Jun 2018: 8,795
- Number of Harmony related claims in process: 14,021
- Number of door-to-door household visits: more than 19 000
- Total value of Harmony related claims paid to date: R168 million (US\$12.4 million) by the Department of Health

As a member of the Minerals Council South Africa and the Gold Working Group, Harmony participates in processes to address legacy issues relating to occupational lung disease. In May 2016, the High Court certified two classes for the related class action, namely TB and silicosis.

On 3 May 2018, six mining companies – African Rainbow Minerals, Anglo American South Africa, AngloGold Ashanti, Gold Fields, Harmony and Sibanye-Stillwater – and attorneys Richard Spoor Inc, Abrahams Kiewitz Inc and the Legal Resources Centre announced that they had reached a settlement in the silicosis and TB class action litigation. The settlement is still to be approved by the South Gauteng High Court.

Industry milestone: eliminating silicosis

By December 2024, 95% of all exposure measurement results will be below the milestone level for respirable crystalline silica of 0.05mg/m³.

Using present diagnostic techniques, no new cases of silicosis will occur among previously unexposed individuals (previously unexposed individuals are those unexposed to mining dust prior to December 2008, equivalent to a new person starting work in the industry in 2009). Workshops have been conducted by the occupational hygienists from all operations to establish a strategy to achieve this milestone.

A decision was taken to set annual incremental targets to meet the milestone ahead of time, and not to wait until the deadline.

This will ensure a special focus on areas where compliance is lacking. The fact that Harmony is currently 82% compliant with the new milestone can be attributed to all the engineering controls in place.

Radiation protection

Radiation levels and radiation exposure are monitored at all our operations in South Africa. The dose limits are 50 millisievert a year and 100 millisievert over five years. All our South African operations comply with these limits. Operational controls ensure that elevated monitoring results are investigated and corrected when necessary. Radiological clearances are conducted at decommissioned sites to ensure the future declassification of these areas.

Community health initiatives

Harmony recognises that it can play an important role in the healthcare of surrounding communities. Activities in FY18 included:

- TB dialogue at Tshepisong, near our Doornkop mine, where leaders were mobilised at all levels in line with the goals and objectives for the National Strategic Plans to promote shared accountability for sustainable response to TB and HIV/AIDS.

A TB-focused health campaign was conducted at Bronville and Ext 20 in conjunction with the Department of Health in the Lejweleputswa district, (close to Bambanani) and a total of 109 community members were screened for TB of which four were referred for further TB management.

Papua New Guinea

In Papua New Guinea, primary healthcare and occupational health surveillance are provided to employees and contractors by medical centres at Hidden Valley and Wafi-Golpu. Medical registers in an online

information system are used to track and review each patient's progress from the first visit through to final treatment.

Upper respiratory tract infections remain one of Harmony's main medical concerns in Papua New Guinea.

Despite experiencing between 3-4m of rain a year, which naturally suppresses dust, testing for respirable silica is conducted with initial focus on higher-risk areas at Hidden Valley. Baseline data indicates that the risk of personnel contracting silicosis is negligible.

A total of 15 198 health examinations took place at Harmony medical centres in Papua New Guinea during FY18 (FY17: 13 133), of which 3 508 (FY17: 3 535) were random drug and alcohol tests.

Upper respiratory tract infections

The Hidden Valley mine is located approximately three kilometres above sea level and most employees reside in the lower, warmer areas. The regular change in altitude between home and work contributes to various respiratory ailments. Other factors contributing to these infections include low levels of personal hygiene in home villages and airborne pollen during peak flowering times which affects air quality. The high rainfall all year round maintains high levels of humidity (around 80-90%), which creates favourable conditions for fungus, bacteria and viruses to thrive.

A total of 2 581 employees were treated for respiratory ailments in FY18 (FY17: 2 427). The number of cases presented annually has remained stable. An employee educational programme on respiratory ailments and gastro-intestinal hygiene has been successfully implemented.

Tuberculosis and HIV/Aids

Hidden Valley has installed a digital X-ray machine and medical laboratory to accurately diagnose tropical diseases, tuberculosis and HIV/Aids. In FY18, 22 new cases of tuberculosis were reported during the year at Papua New Guinea operations (FY17: 5).

In all, 472 personnel underwent voluntary counselling and testing for HIV/Aids during the year at Hidden Valley compared to 150 during FY17.

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 50% increase in the presentation of patients with malaria-like symptoms.

Typhoid fever

A small typhoid fever outbreak occurred at Hidden Valley during FY18 with a total of 51 employees and contractors diagnosed from 30 April to 10 June 2018. All employees diagnosed were isolated, treated with a course of antibiotics and removed from site to prevent further spread. The high-risk employee/contractor group (food-handlers, plumbing crews and cleaners) were vaccinated as part of the prevention process.

Additional rules were also enforced to assist in the control of the infection, such as mandatory hand washing at the mess entrance, anti-bacterial gel at all crib areas, information sessions and talk topics and additional medical isolation rooms. No additional cases have been reported since June.

Community health initiatives

The community health outreach programme was developed to improve the health and wellbeing of local communities. It is led by the Medical Department and a Health Extension Officer. During FY18, the following activities were conducted:

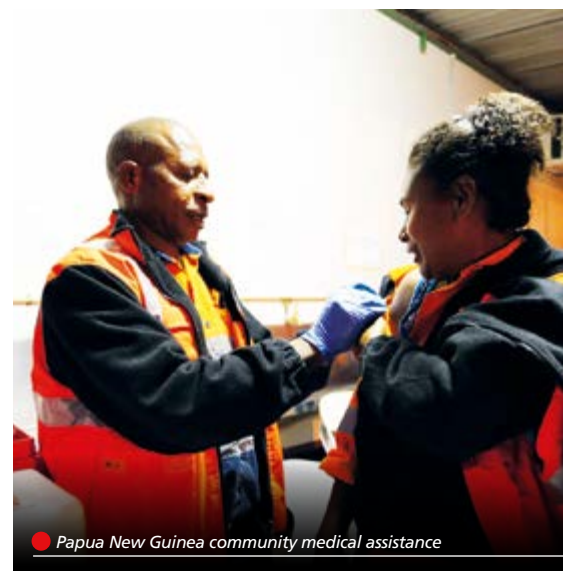
- **Community health awareness:** Obstetrics training was conducted at the Bulolo Health Centre. This was led by the Health Extension Officer and used the new Mama Birthie Manikin (training mannequin), donated by Laerdal
- **Health patrol:** A health patrol was conducted in the Wau and Winima Village area
- **Community medical assistance:** Two cases were treated – an obstetrics case and a trauma case resulting from a bush knife attack
- **Polio vaccination assistance:** The Department of Health was assisted with 688 vaccinations administered since the programme began in June
- **Local health centre visits:** Follow-up visits were conducted with the Bulolo and Wau health centres to maintain relationships and communication. This led to the official handover of mattresses to the Bulolo and Wau health centres during a visit by chief executive officer, Peter Steenkamp



Papua New Guinea community medical assistance



Papua New Guinea community medical assistance



Papua New Guinea community medical assistance

EMPLOYEE ENGAGEMENT



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 EMPLOYEES ARE INTEGRAL TO THE SUCCESS OF OUR BUSINESS

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 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.

REFLECTING ON



FY18

- **Moab Khotsong employees welcomed to Harmony**, our values shared and embedded
- **Employee training and development** continued to be an important focus area
- **Stable employee relations environment**
- **Positive and constructive union stakeholder relationships** and roll out of employee relations policy framework
- **In Papua New Guinea, workforce localisation and gender diversification processes** continued to progress well

OUR EMPLOYEE RELATIONS APPROACH

Our human resources initiatives focus on four underlying goals:

- Entrenching a single organisational culture
- Attracting and retaining employees with high potential
- Developing employees to meet operational skills requirements and improve productivity
- Maintaining effective employee performance and leadership development management systems.

Our employment policies, procedures and practices take into account and comply with relevant labour legislation in South Africa and Papua New Guinea. Recruitment initiatives focus on local communities in both countries. Reviews of all human resource procedures and policies, including remuneration and incentive schemes, are ongoing.

PERFORMANCE FY18

Relevant GRI indicators: G4-EC6, G4-LA1 and G4-LA2

Employee complement

Region	Permanent employees		Contractors		% employees drawn from local communities	
	FY18	FY17	FY18	FY17	FY18	FY17
South Africa ¹	32 520	26 478	5 951	4 512	75	76
Papua New Guinea ²	1 397	1 300	818	911	96	95
Harmony	33 917	27 778	6 769	5 423		

¹ Increase year on year is due to the acquisition of Moab Khotsoong and the integration of the related employee complement

² Excludes employees of the Wafi-Golpu Joint Venture

Employment and gender equity

We are committed to building and maintaining a representative workforce.

South Africa: In FY18, 60% (FY17: 61%) of Harmony's management were historically disadvantaged South Africans, exceeding the Mining Charter 2014 target of 40% for company-level compliance.

There is no difference in salary scales for men and women at Harmony.

In the course of the financial year, a gender diversity strategy was approved by the board which aims to improve women representation in management. The strategy sets specific annual targets for the proportional representation of women in management. See table below.

Five-year plan: women equity targets at managerial or supervisory levels

	FY18	2018	2019	2020	2021	2022
Number of women employees	807	860	900	980	1 070	1 160
%	17	18	19	21	23	25

Harmony reports quarterly on its employment equity plan and progress made to the social and ethics committee. Reports are submitted to the departments of Labour and Mineral Resources annually.

Employment equity performance by category – as at June 2018¹

Occupational category	Historically disadvantaged South Africans ² (target = 40%)	Women employed by category ³ (%)
Board	67%	17%
Top (executive) management	50%	20%
Senior management	53%	26%
Middle management	50%	22%
Junior management	62%	17%
Core and critical skills	67%	13%

¹ Includes employees from the Moab Khotsoong operations

² Historically disadvantaged South Africans exclude white males and foreign nationals

³ All nationalities

EMPLOYEE ENGAGEMENT CONTINUED

Our activities in relation to employees support the following Sustainable Development Goals:



Papua New Guinea: Emphasis is on attracting and retaining locally recruited employees, particularly landowners and local citizens. Operations are governed by a three-year training plan lodged with the local Department of Labour in terms of which we ensure that local employees receive ongoing training and succession is managed. In all, 96% (FY17: 95%) of employees at Hidden Valley were local. In all, 12% of employees in Papua New Guinea are women.

Employee engagement

In applying our “connectedness” value, we ensure employees feel part of the Harmony family. For employees to be committed, productive and passionate about their jobs, they should feel valued, which in turn increases morale, productivity and participation because they feel empowered to communicate openly. Regular employee engagement involves two-way communication with employees. Furthermore, suggestions made by employees are taken seriously and acted upon.

Our ongoing and interactive internal communications process is a management and employee information sharing and engagement platform. This includes regular meetings with heads of departments, work groups and general manager engagement platforms (mass meetings and quarterly productivity meetings), as well as in-depth quarterly internal campaigns to drive important messages across the group, such as safety, ethics and wellness, among others. We also make use of printed material (posters, internal newsletters, memos and flyers) and digital media (email, mine television, intranet, website and text messaging).

The chief executive officer communicates regularly with employees at meetings, during internal roadshows and by email.

Following the acquisition of Moab Khotsong, Harmony’s values were launched to employees and local communities.

Employee relations

Following a long period of negotiations and consultations with organised labour, the Employee Relations Policy Framework was rolled out in March 2018. The policy seeks to standardise and realign labour relations processes, procedures and structures but, more importantly, to establish thresholds for organisational rights.



South African gold wage negotiations

Relevant GRI indicator: G4-EC5

Harmony negotiates changes to wages and other conditions of employment through a recognised collective bargaining structure at a centralised industry forum under the auspices of the Minerals Council South Africa. The October 2015 three-year wage agreement concluded in June 2018. The next round of wage negotiations in the gold sector started in July 2018 and the wage agreement was concluded with the majority of unions on 3 October 2018. For more information, refer to www.goldwageningenegotiations.co.za

Labour disputes and strikes

Relevant GRI indicators: MM4 and G4-LA16

Labour disputes and strikes are considered a material issue as, in addition to the resulting loss of production, disputes affect morale and reputation, and present a risk to non-striking employees, communities and company assets. The employee relations environment has been stable over the past financial year with no unprotected strike action.



We endeavour to maintain peace and stability in our workforce at all times. We want our employees to feel and be safe at work.

Our multi-union environment promotes co-existence, inclusion and collaboration. In addition to quarterly regional meetings with unions, we also encourage proactive and robust engagement to address particular issues. As communication is ongoing at all levels, we are in daily contact with full-time stewards while our general managers and human resources leaders interact regularly at branch level and with shaft committees.

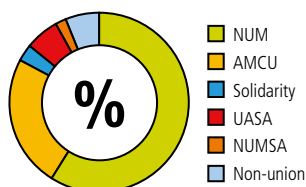
South Africa: To mitigate the risk of labour disputes, we engage frequently with organised labour at mine and company level in addition to direct engagement with employees. We are proactive in addressing employees' queries through established structures and processes.

Various initiatives address the scourge of employee indebtedness with the added benefit of improving employee morale and engagement. These include, among others, financial literacy and personal financial education. In all, 20 851 employees or 78% of the workforce (FY17: 19 621 or 74%) have attended the financial literacy and debt counselling programme since its launch in September 2013. A particular focus area is the discontinuation of non-statutory payroll deductions and notifying employees about emolument attachment orders against their pay. The legal validity of these attachment orders is verified before they are actioned. Dealing with rescission of administration orders: a total of 112 administration orders were rescinded in the course of FY18.

Papua New Guinea: We engage continuously with all stakeholders, including employees, contractors, and national, provincial and local government, as well as landowners and regulators.

Union representation at the South African operations (%)

as at 30 June 2018



Freedom of association

Relevant GRI indicator: G4-HR4

At Harmony, employees and contractors have the right to freedom of association. We participate in collective bargaining processes and adhere to the resulting collective agreements in each country. We strive for honest, two-way discussions through collective bargaining.

South Africa: Harmony recognises five labour unions. Union representation in FY18 was as follows: NUM at 59% (FY17: 62%), AMCU at 24% (FY17: 22%), the UASA at 6% (FY17: 7%), Solidarity at 3% (FY17: 2%) and NUMSA at 2% (FY17: 0%). Some 6% (FY17: 7%) of employees did not belong to a union.

Papua New Guinea: There are no active unions. Industrial relations at Hidden Valley are currently overseen by an employee representative committee.

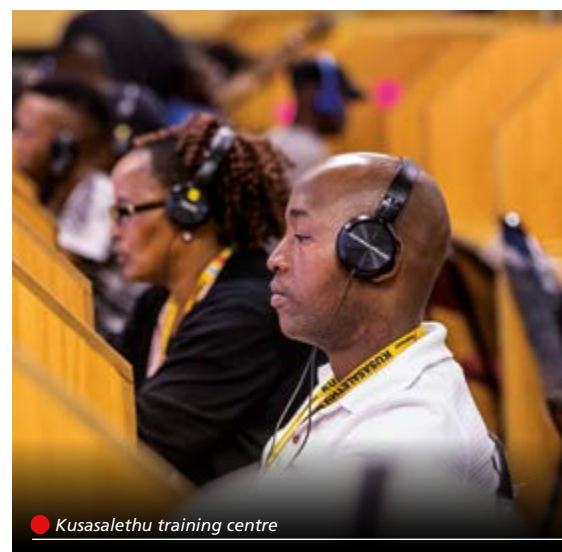
Training and development

Relevant GRI indicators: G4-LA9 and G4-LA10

All employee training and development programmes are aligned with the company's strategic and operational needs and the recognition that Harmony can play a significant role in the development of its employees.

South Africa: Workforce training and skills development is a key focus area. In FY18, 92% (FY17: 92%) of our workforce attended training and skills development amounting to R418 million or US\$32.5 million (FY17: R409 million or US\$30.1 million). This included South African-based research and development initiatives in exploration, mining, processing, technology efficiency, beneficiation and environmental conservation.

Training in critical skills, such as mentoring, hazard identification and risk assessment, mineral resource management and others initiatives is provided through study assistance and various in-house programmes. In FY18, 106 people (FY17: 75) benefited from this initiative. In FY18, 5.0% of the payroll was spent on human resource development (FY17: 5.0%).



EMPLOYEE ENGAGEMENT CONTINUED

Harmony supports various training and skills development programmes as summarised below:

Leadership development	Harmony's leadership development competency framework was initiated in FY18. This framework is part of the initiative to improve organisational efficiency and innovation, and includes training and development programmes aimed at improving leadership effectiveness across all levels from supervisory up to executive level. In FY18, 116 employees embarked on this leadership journey of which 63% have completed the programme.
Adult education and training <i>Relevant GRI indicator:</i> G4-LA10	<p>Adult education and training centres at our South African operations run full-time and part-time classes to ensure that employees are functionally literate and numerate to enable personal growth and promote transformation.</p> <p>In FY18, 493 (FY17: 537) employees and five (FY17: eight) community members attended adult education and training at a cost of R36 million or US\$2.8 million (FY17: R38 million or US\$1.9 million). The overall average pass rate decreased to 57% in FY18 (FY17: 66%).</p> <p>The e-learning programmes, which allow part-time participants to study at their own pace, are proving beneficial to employees as the centres achieved a 67% pass rate for the two exams written within this reporting period.</p>
Bursary programme	On completion of their studies, student bursars can apply for Harmony's graduate development programme. A total of 101 bursaries (FY17: 76) were awarded to students studying at tertiary institutions. Of the bursaries awarded in 2018, 91 (90%) of the students were from local communities and the balance from provinces in which we operate. The pass rate in the 2017 academic year was 90%.
Bridging school	<p>Harmony's bridging school supports mathematics and science at grade 12 level to assist school leavers improve their final results and gain admission to tertiary institutions. On successful completion of grade 12, some are awarded bursaries while others apply for learnerships within the company.</p> <p>Since the school's inception in 1996, we have registered 450 students in all. Of these, 33 (7%) were awarded bursaries and 350 attended our learnership programme. The balance were appointed to various permanent positions within Harmony.</p>
Learnerships	Harmony runs various formal learnership programmes in mining, engineering and ore reserve management. In FY18, 306 learners (FY17: 152) were enrolled and at different stages of completion in the various learnership programmes. Of the total number enrolled (71 in engineering, 54 in mining operations level 2 and 20 in rock breaker level 3/blasting ticket completed their programmes in FY18 (FY17: 123 completed their learnerships). Most of the learners will be appointed to positions available within the company.
Internship and experiential programmes	In support of our social and labour plans, we hosted 43 students (18 internships and 25 experiential trainees) during FY18 (FY17: 49 students – 18 interns and 31 experiential trainees).
Social plan programme	We continue to provide alternative skills training to employees, current and retrenched, through our social plan programme, which was facilitated by the framework agreement between Harmony and NUM in 2003. The training enables people to remain economically active beyond mining, cushioning the economic impact of unavoidable retrenchments or the loss of employment when mines reach the ends of their lives.
Portable skills development	In FY18, 1 532 employees (FY17: 1 545) received portable skills training. Around 57% (FY17: 63%) were proxies (dependants of mine employees). The number of people receiving this training has almost quadrupled in recent years. Over the past nine years, Harmony has provided portable skills training to 7 631 employees (and/or their proxies) in basic electrical work, end-user computing, basic welding, basic motor mechanics, clothing manufacture, furniture making, plumbing, bricklaying, animal husbandry and mixed farming systems.

Papua New Guinea: In FY18, workforce training events conducted at Hidden Valley included:

- Production training
- Safety compliance training
- National Training Accreditation Council compliance
- Professional development
- Computer software courses
- Supervisor development programme

Our communities – training and development

Investing in our communities is a key aspect of our socio-economic approach. Considerable time and effort is dedicated to identifying community members who could benefit from bursaries, work experience, internships and the bridging school. Priority is given to local students. We are encouraged that we were able to provide permanent positions to 71% (five of seven) of the students who successfully completed their internship.

Our community skills development initiative, which began in FY17, is aimed at upskilling members of the community surrounding our operations, and is used to create a pool of trained community members that can be called on to fill appropriate vacancies at our operations.

The formal opening ceremony of the new community training initiative in Welkom was held on the 14 February 2018. The event was well attended by Harmony management, organised labour, the Matjhabeng municipality's executive mayor and his team, and community representatives. The first intake comprised 60 youth from local communities who have all been transferred to various Free State operations for the competence portion of initial training.

Housing and living conditions in South Africa

Of those employees residing in our hostels, all are accommodated in single rooms.

Of the 958 family units to be built over three years, 953 units have been built to date – 99% of the total planned. This includes 448 family units built at the completed Merriespruit housing project.

To further facilitate home ownership, the company participates and supports the pension-backed home loan scheme negotiated for the industry by the Minerals Council South Africa. 1 231 (FY17: 1 772) of employees made use of this facility. The reduction in the number is a result of those employees who have paid off their home loans.

Progress is being made with the construction of the 10 Doornkop family units and a further five family units have been planned. Construction is scheduled to be completed by February 2019. A key aspect of this project is to provide mine housing for the future. The design of the housing units incorporates new energy efficient and building systems.

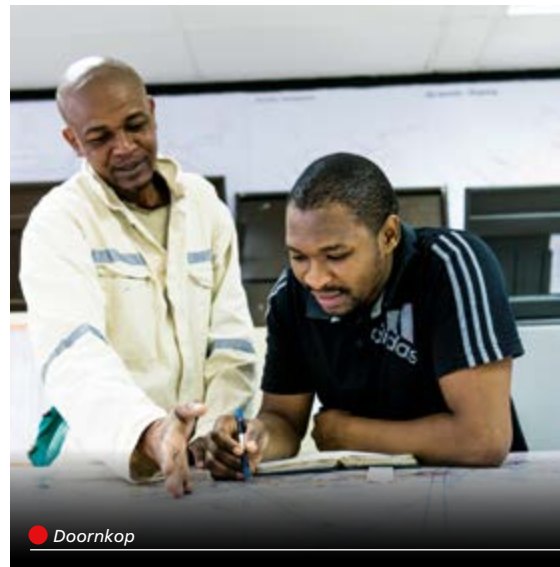
While all existing mine housing is offered to employees at affordable rates, the sale of those in Wedela, near Kusasaletu, is progressing slowly, owing to the inaccessibility of funding. Alternative funding models are being put in place and to date 29 houses have been sold, 162 are in the process of being sold.

HUMAN RIGHTS

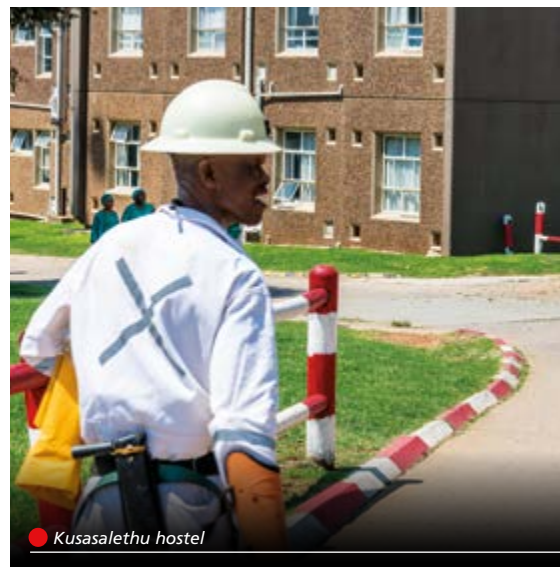
Respect for human rights is entrenched in and underpins our values. Human rights are specifically catered for in our human resource policies, charters and contracts of engagement. The human resources function and community engagement managers closely monitor our human rights performance at operational level.

Harmony upholds the United Nations' global principles on human rights and labour. Following a survey of the company's policies, procedures, and labour practices in FY17, certain policy changes have been undertaken, including internal communication campaigns on Harmony's disciplinary procedure and code of conduct. Employee communication and education on conditions of employment will be a key focus area in FY19.

With regard to unethical behaviour, Harmony has outsourced a 24-hour anonymous crime reporting line for employees, or any member of the public, to use to report any suspicion of unethical behaviour, including crime, corruption and bribery, to management.



Doornkop



Kusasaletu hostel



Harmony RECONNECT

OPERATING PERFORMANCE



Ensuring operational excellence will enable us to deliver our strategy to produce safe, profitable ounces and increase margins.

OPERATIONAL EXCELLENCE IS AN IMPERATIVE

Our successful operational performance is based primarily on the philosophy of operational excellence.

Operational excellence is aimed at creating an environment that enables safe, consistent, predictable and profitable production. In addition to safety, it encompasses infrastructure and asset maintenance, grade and cost management, and capital allocation. This will contribute to improved safety, fewer unplanned work stoppages, improved mining flexibility and optimised costs, among others, and ultimately to the successful delivery on our strategic objectives.

In all of this safety is paramount. Safe operating performance is essential to sustaining our business in the long run. This entails delivering safely on our operational plans, reducing unit costs, improving productivity and thereby maximising the generation of free cash flow.

Our approach takes into account the long-term sustainability of the company as a whole. We aim to mine those areas which will return a positive cash flow. As we are price takers, we control what we can – safety, costs and production.

HIGHLIGHTS



FY18

- Achieved production guidance for third consecutive year and beating all-in sustaining unit cost guidance
- Successful acquisition and integration of Moab Khotsong
- Excellent project delivery at Hidden Valley

OPERATIONAL EXCELLENCE

Disciplined mining is integral to ensuring the safety of our employees, improving productivity and efficiencies and achieving our targets. Ensuring operational excellence helps to create an enabling environment. Safety is considered at all times, teams are motivated, and the workplace environment promotes and enhances productivity.

CREATE AN ENABLING ENVIRONMENT – BUILD SUCCESSFUL, PERFORMANCE DRIVEN AND MOTIVATED TEAMS

Safety and health	Infrastructure	Grade and mining flexibility	Capital allocation	Cost
<ul style="list-style-type: none"> • Live longer journey • Risk management and focus on critical controls 	<ul style="list-style-type: none"> • Asset management and planned maintenance to limit impact of unplanned stoppages 	<ul style="list-style-type: none"> • No mining below cut-off • Increased availability of stoping panels • Remove bottlenecks and manage constraints 	<ul style="list-style-type: none"> • Focused capital allocation that prioritises growth and sustaining capital expenditure 	<ul style="list-style-type: none"> • Focused cost management and project delivery • Improve productivity

= SAFE, CONSISTENT, PREDICTABLE AND PROFITABLE PRODUCTION

Our South African operations have been performing consistently. Increased flexibility, availability of stoping panels and fewer unplanned engineering stoppages due to focused asset management and maintenance have improved the predictability of our production performance. Our disciplined grade management approach has also been important in delivering on guidance and managing cost inflation.

Managing operational risks: Operational risk management is integral to our business and entails managing risks effectively while working safely and being proactive. Risk management is essential to ensure that all supporting systems are functioning efficiently. Safety hazards and operational business risks are identified and dealt with continuously at each of our operations.

IMPROVING THE QUALITY OF OUR PORTFOLIO

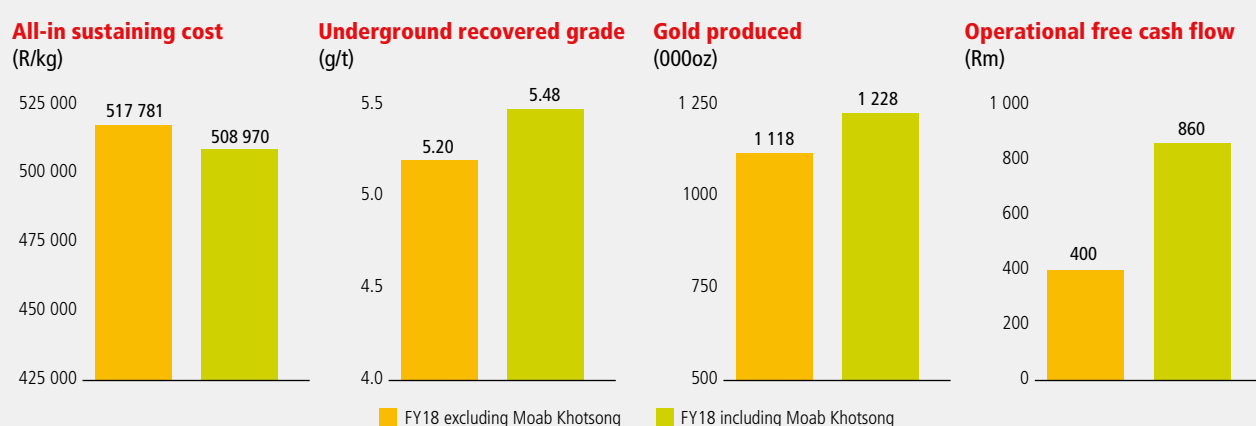
Our growth aspiration to produce 1.5Moz and improve the quality of our asset portfolio was set out at the end of financial year 2016 (FY16). Since then, Harmony has re-invested in Hidden Valley and, in FY18, acquired Moab Khotsong.

These operations will boost cash flow generation by increasing annual production by approximately 450 000 to 500 000 ounces at an average life of mine all-in sustaining unit cost of below US\$950/oz.

The Hidden Valley investment in the stage 5 and 6 cutbacks was delivered safely, below budget and on schedule.

Given the quality of the Moab Khotsong operation, its inclusion into our asset portfolio from 1 March 2018 had an immediate impact on Harmony's FY18 results.

MOAB KHOTSONG'S IMPACT ON HARMONY'S OPERATING PERFORMANCE IN FOUR MONTHS – A COMPARISON



OPERATING PERFORMANCE CONTINUED

OPERATING PERFORMANCE IN FY18

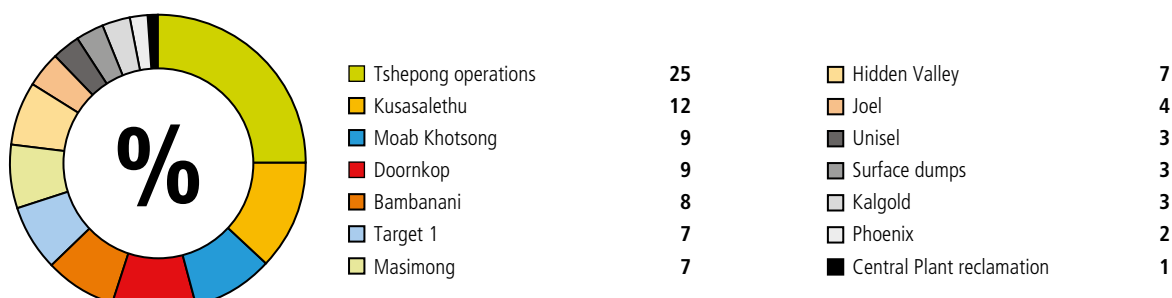
Relevant GRI indicators: G4-13 and G4-EC1

Safety is a priority. We recognise that more needs to be done to ensure a safe working place for all our employees. Sadly, 13 of our colleagues lost their lives in mine-related accidents in FY18. The implementation of our safety programme is focused on stopping significant unwanted events. All stakeholders are committed to and actively enforce a safe working environment. For more information on our safety performance, see [Safety and health](#).

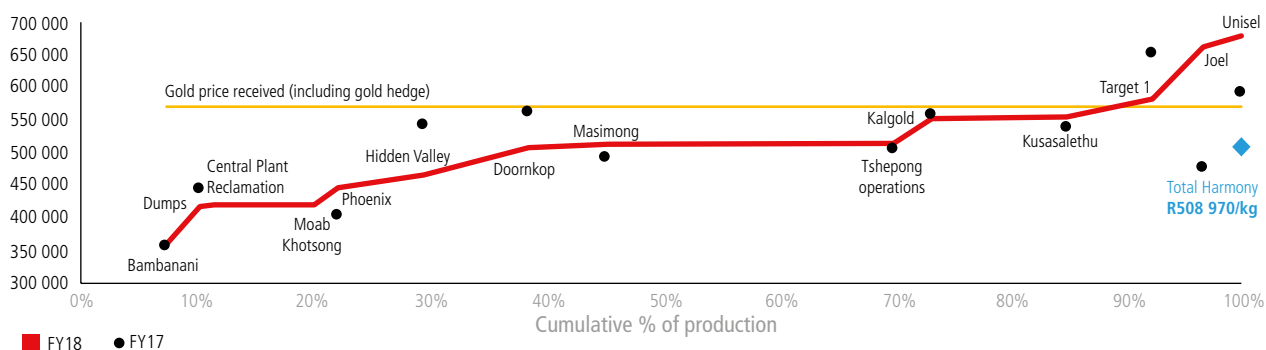
Operational excellence in FY18 was key in achieving our annual production guidance for a third consecutive year and increasing underground grade for a sixth consecutive year. In FY18, Harmony increased production by 13%, produced 1.228Moz of gold (FY17: 1.088Moz) and achieved an 8% increase in underground grade mined of 5.48g/t (FY17: 5.07g/t).

In FY18, Harmony achieved an all-in sustaining unit cost of R508 970/kg (US\$1 231/oz), beating annual guidance of R520 000/kg and the all-in sustaining unit cost of R516 687/kg (US\$1 182/oz) in FY17.

Contribution to group production by operation



All-in sustaining costs FY18 compared to FY17 (R/kg)



Details of performance by each operation are provided in the document [Operations 2018](#) which is available at www.har.co.za.

Performance highlights

- **Doornkop:** gold produced increased by 28%, due to an 18% increase in recovered grade to 4.93g/t and a 9% increase in tonnes milled. Doornkop's excellent safety performance enhanced the performance of the operation in FY18
- **Central Plant Reclamation:** the inaugural annual performance from the operation was successful. The operation produced 502kg (16 139oz) of gold, processed 3.8 million tonnes at an all-in sustaining cost of R420 016/kg (US\$1 017/oz)

- Stable production performance and improved recovery grades at the Tshepong operations, Bambanani and Masimong

Performance from other South African operations

- **Kusasaletu:** a tragic seismic event impacted results in FY18. Encouraging development grades indicate that recovery grades are expected to improve in FY19
- **Kalgold:** waste stripping due to the pit merger continued in FY18. A drilling and exploration programme is underway

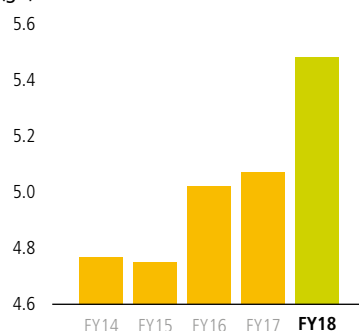
Addressing underperformance

- **Unisel:** a mature operation reaching the end of its life of mine was restructured during the March 2018 quarter. Mining of the Leader Reef was stopped to accelerate mining of the higher grade Basal Reef pillar areas. An improved performance is expected from Unisel during FY19
- **Target 1:** improved on its FY17 performance, where production had been hampered by unfavourable mining conditions in the higher grade areas. Exploration drilling during

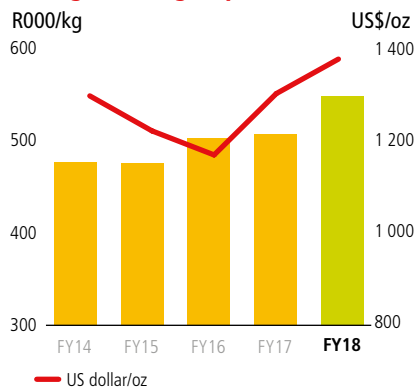
the year resulted in lower grade estimates for certain blocks that had previously been included in the life-of-mine plan but have now subsequently been excluded. The operation requires capital investment to improve productivity. The capital required will be assessed against capital allocation priorities and criteria to determine a suitable way forward for Target 1

- **Joel:** was hampered by the unavailability of planned mining areas due to geological intrusions. The Joel decline project is nearing completion and development in the footwall areas has commenced. Development is expected to continue for 12 to 18 months, following which grades are expected to increase to reserve grade

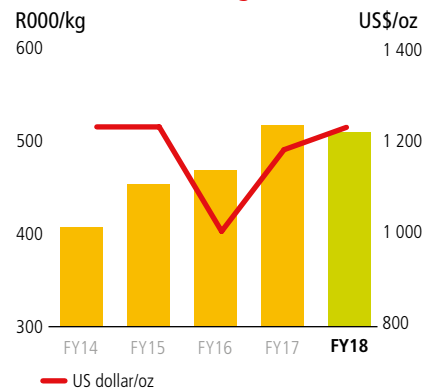
Annual underground grade recovered (g/t)



Average annual gold price received



Annual all-in sustaining costs



OUTLOOK FOR FY19

Our target for FY19 is to produce approximately 1.45Moz at an all-in sustaining cost of R515 000/kg.

Key focus areas in FY19 will be to:

- improve safety focus and performance at all operations
- meet all operational targets and generate free cash flow
- realise synergies at Moab Khotsong operations
- deliver on the Hidden Valley operational plan
- increase focus on cost management and unit cost reductions

FY19 production and capital guidance

Operation	Production	Capital expenditure ^{1,2}		Life of mine
	(oz)	(Rm)	(US\$m)	(years)
Tshepong operations	287 000	1 032	78	17
Moab Khotsong	248 000	595	45	7
Bambanani	82 000	70	5	5
Target 1	86 500	311	23	7
Doornkop	106 500	349	26	16
Joel	50 000	147	11	9
Kusasaletu	155 500	311	23	5
Masimong	72 500	106	8	3
Unisel	32 000	35	3	2
Underground operations – total³	1 120 000	2 956	222	
South African surface operations (tailings and waste rock dumps)	84 500	39	4	14+
Kalgold	39 000	69	5	15
Hidden Valley ⁴	201 500	1 491	112	5
Total	~1.45Moz	4 555	343	

¹ Excludes Golpu

³ At a grade of ~5.85g/t

² At an exchange rate of R13.30/US\$

⁴ Includes deferred stripping

MINERAL RESOURCES AND RESERVES – A SUMMARY

Harmony's statement of mineral resources and mineral reserves as at 30 June 2018 is produced in accordance with the South African Code for the Reporting of Mineral Resources and Mineral Reserves (SAMREC), the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC) and section 12.11 of the JSE Listings Requirements (as updated from time to time).

Mineral resources are reported inclusive of mineral reserves. Detailed mineral resource and reserve statements are presented in the report entitled Mineral Resources and Mineral Reserves 2018, which is available at www.har.co.za/18.

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 United States' Securities and Exchange Commission. United States investors are urged to consider the disclosure in this regard in our Form 20-F which is also available on our website at www.har.co.za/18.

MINERAL RESOURCES AND MINERAL RESERVES

A total attributable gold equivalent mineral resource of 117.8Moz was declared as at 30 June 2018, a 13.0% increase year on year from the 104.3Moz declared on 30 June 2017. Gold contained in mineral resources at the South African operations represented 60% of the total, with the Papua New Guinea assets representing 40% of total gold and gold equivalent mineral resources as at 30 June 2018.

Harmony's total attributable gold and gold equivalent mineral reserves amounted to 36.8Moz of gold, a 0.3% increase on the 36.7Moz declared at 30 June 2017. Gold reserve ounces at our South African operations accounted for 46% while the Papua New Guinea gold and gold equivalent ounces represented 54% of Harmony's total mineral reserves as at 30 June 2018.

South Africa

Underground operations

Harmony's mineral resources at the South African underground operations as at 30 June 2018 totalled 61.3Moz (216.7Mt at 8.79g/t), an increase of 31.4% year on year from the 46.6Moz (159.4Mt at 9.10/t) declared as at 30 June 2017. This increase was due to resources added from the Moab Khotsonq acquisition and from the Kimberley Reef at Doornkop.

Mineral reserves at the South African underground operations as at 30 June 2018 totalled 10.1Moz (52.4Mt at 6.02g/t), an increase of 11.6% year on year from the 9.1Moz (50.4Mt at 5.61g/t) declared as at 30 June 2017. The increase in ounces and grade is due to the reserves added from the Moab Khotsonq acquisition.

Surface operations (including Kalgold)

Mineral resources at Harmony's South African surface operations as at 30 June 2018 were 9.4Moz (1 070.8Mt at 0.27g/t). The 6.9% increase was due to the inclusion of surface sources following the Moab Khotsonq acquisition.

Mineral reserves at the South African surface operations as at 30 June 2018 were 6.8Moz (814.2Mt at 0.26g/t), a decrease of 5.6% due to depletion.

Papua New Guinea Operations

Attributable gold and gold equivalent mineral resources at our Papua New Guinea operations as at 30 June 2018 were 47.1Moz, a decrease of 3.5% year on year from the 48.8Moz declared as at 30 June 2017. This decrease was mainly due to depletion and the new commodity prices used that negatively affected the gold equivalent ratio.

Attributable gold and gold equivalent mineral reserves as at 30 June 2018 are 19.9Moz, a decrease of 2.7% year on year from the 20.5Moz declared as at 30 June 2017.

Independent review

Harmony's South African mineral resources and reserves at Tshepong Operations, Surface Sources and Target as well as the group SAMREC statement were independently reviewed by The Mineral Corporation for compliance with SAMREC.

LEGAL ENTITLEMENT TO MINERALS REPORTED

Harmony's South African operations operate under new order mining rights in terms of the Minerals and Petroleum Resources Development Act (MPRDA) of 2002 (Act No. 28, of 2002).

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.

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 sustainability and environmental performance, refer to *Environmental performance*.

Details relating to the financial provisions made for environmental rehabilitation and funding can be found in note 26 in Harmony's audited annual financial statements which are available in a separate report, the Financial Report 2018, which is available online at www.har.co.za.

COMPETENT PERSON'S DECLARATION

In South Africa, an ore reserve manager is appointed at each operation to take responsibility for the compilation and reporting of the operation's mineral resources and mineral reserves. In Papua New Guinea, competent persons are appointed and have responsibility for the mineral resources and mineral reserves for specific projects and operations.

The mineral resources and mineral reserves in this report are based on information compiled by the following competent persons, as at 25 October 2018.

Mineral resources and mineral reserves of South Africa:

Jaco Boshoff, BSc (Hons), MSc, MBA, Pr. Sci. Nat, MSAIMM, MGSSA, who has 23 years' relevant experience and is registered with the South African Council for Natural Scientific Professions (SACNASP), is a member of the South African Institute of Mining and Metallurgy (SAIMM) and of the Geological Society of South Africa (GSSA).

Mr Boshoff is Harmony's Lead Competent Person.

Physical address:

Randfontein Office Park
Corner of Main Reef Road and Ward Avenue
Randfontein
South Africa

Postal address:

PO Box 2
Randfontein
1760
South Africa

Mineral resources and mineral reserves of Papua New Guinea:

Gregory Job, BSc, MSc, who has 30 years' relevant experience, is a member of the Australian Institute of Mining and Metallurgy (AusIMM).

Physical address:

Level 2, 189 Coronation Drive
Milton, Queensland 4064
Australia

Postal address:

PO Box 1562
Milton, Queensland 4064
Australia

Both these competent persons, who are full-time employees of Harmony, consent to the inclusion in this report of the information in the form and context in which it appears.

Details of the professional registrations of our competent persons can be obtained from the company secretary at: companysecretariat@harmony.co.za

Administrative information for professional organisations

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
<http://www.ausimm.com.au/>

South African Council for Natural Scientific Professions (SACNASP)

Private Bag X540, Silverton, 0127, Gauteng Province, South Africa
Telephone: +27 (12) 841 1075; Facsimile: +27 (86) 206 0427
<http://www.sacnasp.org.za/>

The Southern African Institute of Mining and Metallurgy (SAIMM)

PO Box 61127, Marshalltown, 2107, Gauteng Province, South Africa
Telephone: +27 (011) 834 1273/7; Facsimile: +27 (011) 838 5923/8156
<http://www.saimm.co.za/>

Geological Society of South Africa (GSSA)

CSIR Miningtek
Carlow and Rustenburg roads
Melville, Johannesburg
South Africa

Details of the professional registrations of our competent persons can be obtained from the company secretary at: companysecretariat@harmony.co.za

MINERAL RESOURCES AND RESERVES – A SUMMARY

CONTINUED

MINERAL RESOURCES

As at 30 June 2018, attributable gold equivalent mineral resources were 117.8Moz, up from 104.3Moz in June 2017. The following table shows the year on year reconciliation for the mineral resources.

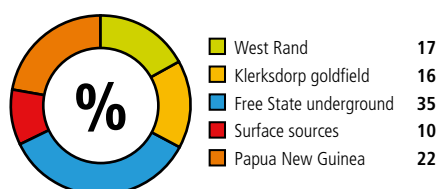
Mineral resource reconciliation – gold and gold equivalents

	Kg (000)	Moz
June 2017 – Gold and gold equivalents	3 243	104.3
Changes during FY18		
Mined during FY18	(49)	(1.6)
Inclusion of Moab Khotsong* and minor changes at other mines	524	16.8
Gold equivalents	(54)	(1.7)
June 2018 – Gold and gold equivalents	3 664	117.8

* Moab Khotsong and related assets were acquired effective 1 March 2018

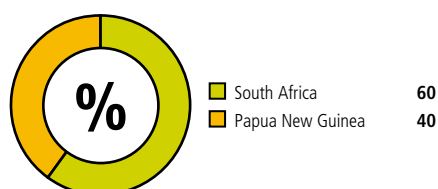
Mineral resources – gold (excluding gold equivalents)

Contribution by region



Mineral resources – gold and gold equivalents

Contribution by country



ASSUMPTIONS

In converting our mineral resources to mineral reserves, the following commodity prices and exchange rates were applied:

- A gold price of US\$1 275/oz
- An exchange rate of R/US\$13.42
- These parameters result in a rand gold price of R550 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\$1 275/oz Au, US\$17.00/oz Ag, US\$7.00/lb Mo and US\$3.00/lb Cu at an exchange rate of US\$0.76 per A\$
- Gold equivalent ounces are calculated assuming US\$1 275/oz Au, US\$3.00/lb Cu and US\$17.00/oz Ag, and assuming a 100% recovery for all metals

Note: Au = gold; Cu = copper; Ag = silver; Mo = molybdenum

MINERAL RESERVES

As at 30 June 2018, Harmony's attributable gold equivalent mineral reserves were 36.8Moz, up from 36.7Moz. The year on year mineral reserves reconciliation is shown below.

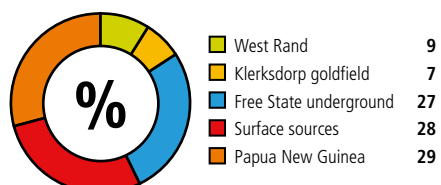
Mineral reserve reconciliation – gold and gold equivalents

	Kg (000)	Moz
June 2017 – Gold and gold equivalents	1 143	36.7
Changes during FY18		
Mined during FY18	(40)	(1.3)
Moab Khotsong*, Doornkop and minor changes at other mines	59	1.9
Gold equivalents	(17)	(0.5)
June 2018 – Gold and gold equivalents	1 146	36.8

* Moab Khotsong and related assets were acquired effective 1 March 2018

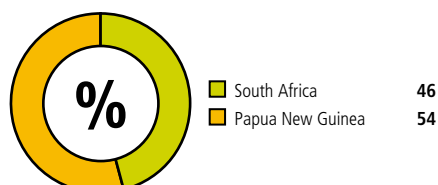
Mineral reserves – gold (excluding gold equivalents)

Contribution by region



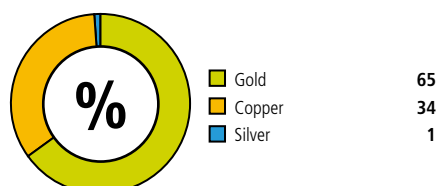
Mineral reserves – gold and gold equivalents

Contribution by country



Mineral reserves – gold and gold equivalents

Contribution by metal



MINERAL RESOURCES AND RESERVES – A SUMMARY

CONTINUED

MINERAL RESOURCE STATEMENT

	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)
Gold												
SOUTH AFRICA – UNDERGROUND												
Free State												
Tshepong Operations	23.3	11.32	8 474	11.8	9.95	3 766	36.9	9.63	11 434	72.0	10.23	23 674
Bambanani	0.8	16.78	457	–	–	–	–	–	–	0.8	16.78	457
Unisel	0.3	7.90	81	0.1	8.41	36	–	–	–	0.5	8.05	118
Joel	3.5	7.89	895	3.7	8.30	997	0.7	7.37	172	8.0	8.04	2 064
Masimong	2.7	8.01	696	0.3	6.84	64	0.01	5.99	1	3.0	7.89	761
Target 1	7.9	4.68	1 195	5.8	6.67	1 235	3.2	5.45	567	16.9	5.50	2 996
Target 3	0.6	9.19	178	2.9	10.17	965	1.2	8.66	340	4.8	9.66	1 483
Total	39.2	9.49	11 976	24.6	8.92	7 063	42.1	9.24	12 513	106.0	9.26	31 553
West Rand												
Doornkop South Reef	3.2	8.29	857	3.6	8.38	975	5.2	8.48	1 415	12.0	8.40	3 247
Doornkop Main Reef	0.1	5.38	14	0.05	5.51	8	0.02	5.32	3	0.1	5.41	25
Doornkop Kimberley Reef	18.1	3.36	1 957	12.1	3.15	1 226	10.1	3.28	1 066	40.3	3.28	4 249
Doornkop – total	21.4	4.11	2 828	15.8	4.35	2 209	15.3	5.05	2 484	52.5	4.46	7 521
Kusasaletu	2.5	12.48	1 020	20.2	8.87	5 768	3.5	9.46	1 072	26.3	9.30	7 861
Total	24.0	4.99	3 848	36.0	6.89	7 978	18.8	5.87	3 556	78.8	6.07	15 382
Klerksdorp goldfield												
Moab Khotson	3.0	19.55	1 916	19.4	13.89	8 643	9.5	12.39	3 771	31.9	13.99	14 331
South Africa underground – total	66.3	8.33	17 741	80.0	9.21	23 684	70.4	8.76	19 840	216.7	8.79	61 265
SOUTH AFRICA – SURFACE												
Kalgold	12.1	0.85	332	29.6	0.80	758	3.3	0.71	74	44.9	0.81	1 164
Phoenix	62.7	0.29	575	–	–	–	–	–	–	62.7	0.29	575
St Helena	191.3	0.27	1 656	–	–	–	–	–	–	191.3	0.27	1 656
Central Plant	–	–	–	64.6	0.27	552	–	–	–	64.6	0.27	552
Waste rock dumps	–	–	–	3.9	0.51	64	19.3	0.43	265	23.3	0.44	329
Tailings	–	–	–	553.3	0.22	3 971	15.4	0.19	94	568.8	0.22	4 065
Mispah	–	–	–	73.0	0.30	708	–	–	–	73.0	0.30	708
Kop Paydam	10.8	0.20	70	0.2	0.23	1	–	–	–	11.0	0.20	72
Moab MOD	–	–	–	7.4	0.37	89	–	–	–	7.4	0.37	89
Kalgold Tailings Dam	–	–	–	–	–	–	23.8	0.26	201	23.8	0.26	201
South Africa surface – total	276.9	0.30	2 634	732.0	0.26	6 142	61.9	0.32	635	1 070.8	0.27	9 411
SOUTH AFRICA – TOTAL	343.2		20 375	812.0		29 827	132.3		20 475	1 287.5		70 676
PAPUA NEW GUINEA												
Hidden Valley/Kaveroi	1.9	0.92	56	81.7	1.44	3 779	3.0	1.18	113	86.6	1.42	3 948
Hamata	0.03	1.03	1	2.4	1.90	146	0.2	1.41	10	2.6	1.85	157
Kili Teke	–	–	–	–	–	–	237.0	0.24	1 810	237.0	0.24	1 810
Wafi ¹	–	–	–	56.7	1.72	3 146	11.3	1.30	475	68.1	1.65	3 621
Golpu ¹	–	–	–	344.0	0.71	7 905	67.9	0.63	1 377	411.9	0.70	9 282
Nambonga ¹	–	–	–	–	–	–	19.9	0.79	507	19.9	0.79	507
PAPUA NEW GUINEA – TOTAL	1.9	0.92	57	484.9	0.96	14 977	339.3	0.39	4 292	826.1	0.73	19 326
HARMONY – TOTAL	345.1		20 432	1 296.9		44 803	471.6		24 767	2 113.6		90 002

MINERAL RESOURCE STATEMENT continued

Other metals	Measured resources			Indicated resources			Inferred resources			Total Mineral resources		
PAPUA NEW GUINEA Silver	Tonnes (Mt)	Grade (g/t)	Silver (000oz)	Tonnes (Mt)	Grade (g/t)	Silver (000oz)	Tonnes (Mt)	Grade (g/t)	Silver (000oz)	Tonnes (Mt)	Grade (g/t)	Silver (000oz)
Hidden Valley	1.9	19.61	1 193	81.7	27.50	72 256	2.9	29.21	2 791	86.6	27.38	76 240
Golpu ¹	—	—	—	344.0	1.29	14 247	67.9	1.06	2 322	411.9	1.25	16 569
Nambonga ¹	—	—	—	—	—	—	19.9	2.87	1 835	19.9	2.87	1 835
TOTAL	1.9	19.61	1 193	425.7	6.32	86 503	90.8	2.38	6 948	518.4	5.68	94 643
Copper	Tonnes (Mt)	Grade (%Cu)	Cu (Mlb)	Tonnes (Mt)	Grade (%Cu)	Cu (Mlb)	Tonnes (Mt)	Grade (%Cu)	Cu (Mlb)	Tonnes (Mt)	Grade (%Cu)	Cu (Mlb)
Kili Teke	—	—	—	—	—	—	237.0	0.34	1 767	237.0	0.34	1 767
Golpu ¹	—	—	—	344.0	1.09	8 232	67.9	0.85	1 273	411.9	1.05	9 505
Nambonga ¹	—	—	—	—	—	—	19.9	0.21	94	19.9	0.21	94
TOTAL	—	—	—	344.0	1.09	8 232	324.8	0.44	3 133	668.8	0.77	11 365
Molybdenum	Tonnes (Mt)	Grade (ppm)	Mo (Mlb)	Tonnes (Mt)	Grade (ppm)	Mo (Mlb)	Tonnes (Mt)	Grade (ppm)	Mo (Mlb)	Tonnes (Mt)	Grade (ppm)	Mo (Mlb)
Kili Teke	—	—	—	—	—	—	237.0	168	88	237.0	168	88
Golpu ¹	—	—	—	344.0	94	71	67.9	72	11	411.9	90	82
TOTAL	—	—	—	344.0	94	71	304.9	146	98	648.9	118	169
Gold equivalents												
Silver	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)
Hidden Valley	1.9		13	81.7		1 020	3.0		39	86.6		1 072
Copper	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)
Kili Teke	—		—	—		—	237.0		4 157	237.0		4 157
Golpu ¹	—		—	344.0		19 365	67.9		2 993	411.9		22 358
Nambonga ¹	—		—	—		—	19.9		220	19.9		220
TOTAL	—		—	344.0		19 365	324.8		7 370	668.8		26 735
Silver and copper – total	1.9		13	425.7		20 385	327.7		7 410	755.4		27 807
PAPUA NEW GUINEA – TOTAL (including gold equivalents)	1.9		70	484.9		35 362	339.3		11 701	826.1		47 133
HARMONY – TOTAL (including gold equivalents)	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)	Tonnes (Mt)		Gold (000oz)
HARMONY – TOTAL (including gold equivalents)	345.1		20 445	1 296.9		65 188	471.6		32 176	2 113.6		117 809
Uranium	Measured resources			Indicated resources			Inferred resources			Total Mineral resources		
	Tonnes (Mt)	Grade (kg/t)	U ₃ O ₈ (Mlb)	Tonnes (Mt)	Grade (kg/t)	U ₃ O ₈ (Mlb)	Tonnes (Mt)	Grade (kg/t)	U ₃ O ₈ (Mlb)	Tonnes (Mt)	Grade (kg/t)	U ₃ O ₈ (Mlb)
SOUTH AFRICA												
Free State Surface Sources	—	—	—	178.8	0.10	39	—	—	—	178.8	0.10	39
Mispah I	—	—	—	73.0	0.12	20	—	—	—	73.0	0.12	20
Kop Paydam	10.8	0.13	3	0.2	0.14	0.05	—	—	—	11.0	0.13	3
Moab Khotsong (underground)	—	—	—	22.4	0.67	33	9.5	0.64	13	31.9	0.66	46
TOTAL	10.8	0.13	3	274.4	0.15	92	9.5	0.64	13	294.7	0.17	109

¹ Represents Harmony's equity portion of 50%

MINERAL RESOURCES AND RESERVES – A SUMMARY

CONTINUED

MINERAL RESERVE STATEMENT

	Proved mineral reserves			Probable mineral reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000oz)	Tonnes (Mt)	Grade (g/t)	Gold (000oz)	Tonnes (Mt)	Grade (g/t)	Gold (000oz)
Gold									
SOUTH AFRICA UNDERGROUND									
Free State									
Tshepong Operations	19.7	5.93	3 762	3.7	4.84	581	23.5	5.76	4 343
Bambanani	1.0	12.08	386	–	–	–	1.0	12.08	386
Unisel	0.3	4.89	43	0.1	5.69	10	0.3	5.02	53
Masimong	1.7	4.28	234	0.1	3.42	13	1.8	4.23	246
Joel	2.5	4.74	381	1.8	5.33	305	4.3	4.99	686
Target 1	3.2	4.32	442	2.0	4.29	282	5.2	4.31	724
Total	28.4	5.75	5 247	7.7	4.79	1 190	36.1	5.55	6 437
West Rand									
Doornkop South Reef	3.0	5.01	480	4.0	5.07	648	7.0	5.05	1 129
Kusasaletu	3.7	7.26	857	0.6	5.34	101	4.3	7.00	959
Total	6.6	6.26	1 338	4.6	5.11	750	11.2	5.79	2 087
Klerksdorp goldfield									
Moab Khotsong	2.5	10.32	815	2.6	9.50	800	5.1	9.90	1 615
South Africa underground – total	37.5	6.14	7 400	14.9	5.72	2 739	52.4	6.02	10 139
SOUTH AFRICA SURFACE									
Kalgold	9.4	0.95	286	11.8	1.05	397	21.1	1.01	683
Phoenix	62.7	0.29	575	–	–	–	62.7	0.29	575
St Helena	108.6	0.27	933	–	–	–	108.6	0.27	933
Central	–	–	–	64.6	0.27	552	64.6	0.27	552
Waste rock dumps	–	–	–	3.9	0.51	64	3.9	0.51	64
Tailings	–	–	–	553.3	0.22	3 971	553.3	0.22	3 971
South Africa surface – total	180.6	0.31	1 795	663.6	0.24	4 984	814.2	0.26	6 779
SOUTH AFRICA – TOTAL	218.0		9 195	648.5		7 723	866.6		16 918
PAPUA NEW GUINEA									
Hidden Valley/Kaveroi	1.9	0.92	56	23.3	1.62	1 215	25.2	1.57	1 271
Hamata	0.03	1.03	1	0.5	2.11	35	0.5	2.06	35
Golpu ¹	–	–	–	202.3	0.86	5 573	202.3	0.86	5 573
PAPUA NEW GUINEA – TOTAL	1.9	0.92	57	226.1	0.94	6 823	228.0	0.94	6 880
HARMONY – TOTAL	220.0		9 252	874.6		14 546	1 094.6		23 797

MINERAL RESERVE STATEMENT continued

Other metals	Proved mineral reserves			Probable mineral reserves			Total mineral reserves		
PAPUA NEW GUINEA	Tonnes	Grade	Silver	Tonnes	Grade	Silver	Tonnes	Grade	Silver
Silver	(Mt)	(g/t)	(000oz)	(Mt)	(g/t)	(000oz)	(Mt)	(g/t)	(000oz)
Hidden Valley	1.9	19.61	1 193	23.3	32.12	24 083	25.2	31.18	25 276
	Tonnes	Grade	Cu	Tonnes	Grade	Cu	Tonnes	Grade	Cu
Copper	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)
Golpu ¹	–	–	–	202.3	1.21	5 393	202.3	1.21	5 393
Gold equivalents									
Silver	Tonnes		Gold	Tonnes		Gold	Tonnes		Gold
	(Mt)		(000oz)	(Mt)		(000oz)	(Mt)		(000oz)
Hidden Valley	1.9		17	23.3		340	25.2		357
	Tonnes		Gold	Tonnes		Gold	Tonnes		Gold
Copper	(Mt)		(000oz)	(Mt)		(000oz)	(Mt)		(000oz)
Golpu ¹	–		–	202.3		12 686	202.3		12 686
Silver and copper – total									
(gold equivalents)	1.9		17	225.6		13 026	227.5		13 043
PAPUA NEW GUINEA – TOTAL									
(including gold equivalents)	1.9		74	226.1		19 849	228.0		19 923
HARMONY – TOTAL									
(including gold equivalents)	220.0		9 269	874.6		27 572	1 094.6		36 840
Uranium									
SOUTH AFRICA									
	Proved mineral reserves			Probable mineral reserves			Total mineral reserves		
	Tonnes		U ₃ O ₈	Tonnes		U ₃ O ₈	Tonnes		U ₃ O ₈
	(Mt)	kg/t	(Mlb)	(Mt)	kg/t	(Mlb)	(Mt)	kg/t	(Mlb)
Moab Khotso (underground)	2.5	0.35	2	2.6	0.40	2	5.1	0.38	4

¹ Represent Harmony's equity portion of 50%

EXPLORATION AND PROJECTS



Exploration is vital to ensuring the long-term economic sustainability of Harmony as a mining company.

WHY EXPLORATION IS IMPORTANT

Exploration and the discovery of significant and viable orebodies for development are essential to the sustainability of Harmony. By ensuring a future production pipeline of reserves and resources, Harmony will be able to operate sustainably and profitably in the long term.

OUR APPROACH

Our exploration strategy is aimed largely at pursuing brownfields exploration targets close to existing infrastructure. This will drive short to medium term organic ore reserve replacement and growth to support our current strategy of increasing quality ounces and to mitigate the risk of a depleting ore reserve base.

Key work streams underpinning the FY18 exploration programme include brownfield exploration at:

- Hidden Valley in Papua New Guinea and Kalgold in South Africa to optimise existing open-pit operations and extend their mine lives
- Our underground operations in South Africa

Wafi-Golpu, a greenfield exploration project, remains an excellent long-term opportunity for Harmony.

HIGHLIGHTS AND MILESTONES



FY18

Papua New Guinea

- Advancement of the Wafi-Golpu project – updated feasibility study released in March 2018
- Brownfield focus around Hidden Valley

South Africa

- Kalgold brownfield exploration programme – mineral resource updated and prefeasibility study underway to optimise Kalgold operation
- Tailings retreatment expansion underway

PERFORMANCE FY18

Papua New Guinea

The case for exploration investment in Papua New Guinea remains strong. Harmony closely monitors the environment for new opportunities to enhance our project portfolio, in line with core operating capabilities. The country is hugely prospective and under-explored. Harmony has an established track record of discovery and adding value through cost-effective exploration:

- Since 2003, resource growth from Harmony-held tenements, both those held in joint venture (Harmony's 50% equity share) and by Harmony alone (100%-held), amounts to 12.7Moz of gold and 5.1Mt of copper
- Discovery cost on a per ounce gold equivalent basis of less than US\$10 is among the best in the world

Key work streams underpinning the FY18 exploration programme included:

- The Wafi-Golpu copper-gold deposit feasibility study update, and progressing of the special mining lease application
- Near-mine exploration and projects in support of extending mine life at Hidden Valley
- Maintenance of a greenfield exploration portfolio to enhance Harmony's world-class copper-gold footprint
- In FY18, we spent R407.4 million (US\$37.0 million) (FY17: R431 million; US\$32 million) on exploration

Wafi-Golpu update

The feasibility study for Wafi-Golpu was updated to incorporate the recommendations of previous studies and additional orebody data obtained. The proposed project involves development of the high-grade Golpu orebody and optimised capital expenditure profile, rate of production and cash flow.

The updated feasibility study confirmed a staged approach to project development and that block caving was the preferred mining method.

Supporting documents for the special mining lease application were submitted in March 2018 and the environmental impact statement in June 2018. Granting of the special mining licence is expected by

June 2019 to be followed by board approval and the securing of a funding solution.

Key statistics for the Wafi-Golpu project (100% basis) include:

- Resource containing 18.6Moz gold and 8.6Mt copper
- Estimated life of mine of more than 28 years
- Steady state production estimated at 161 000t of copper, 266 000oz of gold (more than 1.4Moz of gold equivalents ounces annually)
- Above average recovery grades:
 - Gold – 0.90g/t,
 - Copper – 1.27%
- Estimated costs of US\$0.26/lb are in the lowest decile for copper production
 - expressed in terms of gold, an all-in sustaining cost of minus US\$2 128/oz is estimated

Hidden Valley brownfield exploration

Following the acquisition of 100% of the contiguous tenement package surrounding the Hidden Valley mining lease in FY17, our exploration strategy shifted its focus to near-mine brownfield targets covering an area of 502km² of tenure, centered on one of Papua New Guinea's premier goldfields and including the historic mining centre at Wau.

Prefeasibility studies have begun on the down dip extensions of the Hidden Valley orebody to extend the mine life. Target generation to identify potential high-grade satellite epithermal gold deposits progressed and a systematic grid-based geochemical coverage over the Hidden Valley mining lease was completed. Initial drill intercepts together with widespread alteration and gold geochemical footprint highlighted the excellent prospectivity at the historic mining centre at Wau.

Greenfield exploration and tenement rationalisation

Regional greenfield exploration expenditure was scaled back in favour of near-mine brownfield exploration. Harmony's (100%) tenement holding reduced to 963.75km² (FY17: 1 265km²). The joint venture (Harmony 50%) tenement holding was reduced to 325.3km² (FY17: 495km²).

Exploration licence 1629 was held under option to purchase by Pacific Niugini Minerals who are also responsible for maintaining the joint venture tenement in good standing. Harmony continues to manage exploration on the portfolio tenement package on behalf of the exploration portfolio joint venture participants (ultimate parent companies: Newcrest 50%; Harmony 50%).



Kalgold drilling



Kalgold

EXPLORATION AND PROJECTS CONTINUED

South Africa

In FY18, Harmony spent R50 million on exploration in South Africa with expenditure of R88 million planned for FY19.

Underground exploration

A total of 62 961m (FY17: 62 860m) was drilled across Harmony's underground operations in South Africa. Underground exploration drilling provides information to determine the elevation and grade of the targeted reef horizon as well as on geological features in the immediate surrounding lithology. It assists in structural geological interpretation and evaluation of specific areas as well as in the compilation of regional structural geological and evaluation models. Mine geologists and planners use drilling information to determine a mine's development strategy and eventually its economic viability.

Brownfield exploration – Kalgold

The Kalgold operation is located approximately 276km west of Johannesburg, in North West Province, South Africa. Harmony holds 448 square kilometres of highly prospective tenure over the Kraaipan Greenstone Belt which includes the Kalahari Goldridge Mining Right (Kalgold), its associated open-pit gold mines and several adjacent prospecting rights. The titles provide an ideal mix of near-mine and new mine opportunities that can leverage existing infrastructure and be fast-tracked into production with aggressive exploration.

The brownfield drill campaign undertaken at Kalgold has proven a highlight of Harmony's FY18 exploration programme. In all, 20,872m were drilled. Intercepts returned over the course of the programme outlined an expanded, robust mineralised system with over 2.1 kilometres of strike, extending to in excess of 300m below surface (a full list of drill intercepts is included with the SAMREC Table 1 report at www.harmony.co.za).

An updated mineral resource estimate incorporating FY18 drill results was compiled post year-end. The final SAMREC-compliant, audited, mineral resource declaration contains 76.5Mt @ 0.95 g/t Au for 2.34Moz Au, an increase of 1.05Moz (180%) from the 2017 estimate.

Kalgold mineral resource statement as at 30 September 2018¹:

Resource category	Mt	Au g/t	Au (koz)
Measured	11.3	0.85	310
Indicated	36.4	0.96	1 125
Inferred	28.7	0.98	903
Total	76.5	0.95	2 339

¹ Reported at 0.44 g/t cut-off within an optimised pit shell generated from Whittle 3D.

Further, the resource growth outlook is extremely positive. The deposit remains open to the south and at depth. Infill and scoping drilling continues. Several high-grade satellite targets have also been identified for follow-up work in FY19.

The expanded resource base presents an exceptional organic growth opportunity for Harmony and mining studies have begun to test a range of concepts to achieve a step change in the production profile of the operation through higher mining and throughput rates.

Tailings retreatment expansion

Several tailings retreatment growth projects are currently underway to optimise available surface sources in the Free State. These include:

- **Central Plant tailings retreatment facility:** A feasibility study has begun into the planned expansion and the potential to increase monthly capacity from 300 000 tonnes to 500 000 tonnes
- **Retreatment of newly-acquired Mispah tailings:** A prefeasibility study is being conducted to investigate the economic viability of retreating the tailings material stored in the Mispah dams, which were acquired in the Moab Khotsoeng transaction
- **Saints tailings retreatment project:** Expansion underway

Other areas of exploration

- **B-Reef:** High-grade B Reef areas have been identified at Tshepong which will become part of the life of mine plan. B Reef exploration began at Phakisa during FY18.
- **Doornkop:** The seismic survey and 3D modelling completed for Doornkop results in geological model that significantly improves the confidence in the structure of the orebody.
- **Target North:** Three exploration boreholes are planned for FY19.

For further detail on our exploration programme and projects currently underway, please see Mineral Resources and Mineral Reserves 2018, available at www.har.co.za.



SOCIO-ECONOMIC DEVELOPMENT



Upliftment of our communities has a significant impact on socio-economic development in South Africa and Papua New Guinea.

SOCIO-ECONOMIC DEVELOPMENT IS IMPORTANT

Harmony recognises its responsibility to be a good corporate citizen and is committed to sustainable socio-economic development.

Investing in the future of communities beyond the life of our mines is an integral part of our businesses and core to preserving our social licence to operate. Creating shared value has been and remains an integral part of Harmony's corporate culture, underpinning our branding and reputation as a responsible corporate citizen and valued partner within our communities.

In FY18 Harmony aligned its socio-economic strategy with the aims of the United Nations Sustainable Development Goals.

HIGHLIGHTS



FY18

- Second generation social and labour plans completed – R476 million invested
- Third generation social and labour plans for next five years submitted to regional offices of the Department of Mineral Resources – **these plans prioritise impactful projects to uplift communities, focusing on education infrastructure and enterprise development**
- Hosting of local community supplier days – **working with communities to promote local preferential procurement with R1.8 billion invested in host communities**
- **Community coffee projects in Papua New Guinea**



● Nanabolela Secondary School

Socio-economic development at Harmony can be broadly categorised as follows:

- **Protecting our licence to operate**
 - In South Africa, delivering on mine community development
 - In Papua New Guinea, social commitments in terms of relevant landowner and government agreements
 - Building linkages with business through enterprise and supplier development
- **Social upliftment**
 - job creation and poverty alleviation
 - critical infrastructure development and human settlement
 - alternative industries
 - education and skills development
 - local procurement
- **Engaging with communities**
Harmony engages with various community stakeholders on a regular basis to discuss and agree on key projects for host communities. Harmony has established multi-party stakeholder community forums, which accommodate various government departments and non-governmental organisations (NGOs) in the district. Refer to *Stakeholder engagement and our material issues* for further detail.
- **Environmental management**
Stewardship of the environment is a key tenet of sustainability. Stakeholder engagement and compliance with environmental laws and regulations are integral in the management of our sustainability. Harmony prioritises environmental management programmes and initiatives that create local employment opportunities, which

support skills development. Refer to *Environmental performance* for further details.

PERFORMANCE FY18

Relevant GRI indicators: G4-EC7, G4-EC8, G4-EC9, G4-SO1, G4-SO9 and G4-SO10

Protecting our licence to operate

At Harmony, mine community development can be broadly defined as an outcome of local initiatives by stakeholders identifying and using local resources, ideas and skills to stimulate socio-economic growth and development. The outcome of this exercise is the creation of employment opportunities, alleviation of poverty and addressing inequality while attracting external investment.

It is an important tool in creating sustainable local economies.

South Africa

Harmony's South African operations are governed by approved mining rights, which are each bound by an agreed and approved social and labour plan. Our social and labour plans include 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.

R476 million, was spent on the five-year social and labour plans for 2013 to 2017, concluded in December 2017. Of this, R313 million was received from government for two legacy projects: the conversions of the Masimong 4 and Merriespruit 3 hostels into residential units.

Harmony's socio-economic development activities are aligned with the following Sustainable Development Goals:



Socio-economic spend by municipality (R million)*

Municipality	Five-year spend (calendar 2013 to 2017)	Spend in FY18
Ratlou	13	2
Matjhabeng	96	13
Masilonyana	11	1
Merafong	9	2
City of Johannesburg	34	3

* Rounded to the nearest million



SOCIO-ECONOMIC DEVELOPMENT CONTINUED



The new five-year social labour plans, submitted to the relevant regional Department of Mineral Resources offices for approval, are being implemented. The plans for the Free State operations have been approved with approval for the remaining plans due by the end of October 2018.

Extensive communication and engagement was conducted with various community representatives and local authorities in support of the various commitments. Harmony also engaged with the Department of Agriculture and Rural Development as well as the Department of Economic Development, Tourism, Environmental Affairs and Small Business.

Ongoing projects include:

- Virginia Sports Academy (fully supported by Harmony and employing 25 people) funding 50 boys at an annual cost of approximately R7 million (US\$0.5 million)

- Virginia Jewellery School (fully supported by Harmony and employing 13 people) funding 13 students in their third year of study and two jewellery stores at an annual cost of approximately R4 million (US\$0.3 million)

In terms of our third generation social and labour plans, Harmony is also set to collaborate with peers on an infrastructure development project, identified by the Matjhabeng local municipality, in the Free State during the coming financial year.

For further details of community projects, see *Socio-economic projects 2018*, which is available at www.har.co.za.

During the period under review, we adopted a proven vegetable tunnel project model, which was approved by executive mayors, members of mayoral councils and councillors of the municipalities after a visit to the site near Krugersdorp. It will be implemented in the following areas in FY19:

- Doornkop (Soweto)
- Moab Khotsong (Orkney)
- Kusasaletu (Carletonville)

Papua New Guinea

In Papua New Guinea, regulatory control vests in a memorandum of agreement between Harmony, various national, regional and local governments, and the Hidden Valley landowner association with similar social commitments to those in South Africa. Mine community development projects and programmes focus on health, education, agriculture and infrastructure.

Harmony's infrastructure programme at the Hidden Valley mine focuses on building, repairing and upgrading roads, bridges, educational facilities, health facilities and water supply in the landowner and local community villages.

Education programmes in FY18 included:

- Stationery for students and teachers at elementary and primary schools
- Harmony's Tutudesk initiative
- Education centre and school support
- Assisting the provincial government in engaging new teachers
- Adult literacy programmes

Case study: Tutudesk initiative in Papua New Guinea

Hidden Valley launched its Tutudesk initiative at Kaisenik Primary School in Wau and Hompiri Elementary School in Morobe Province on 22 August 2017.

A total of 1 000 portable Tutudesks were distributed to 28 elementary schools in the Wau and Bulolo districts and to the Biangai and Watut tribes who are landowners at Hidden Valley.

The desks, made in South Africa, are named after Nobel Peace Prize laureate and retired Archbishop Desmond Tutu. The Tutudesk campaign aims to deliver at least 20 million desks to school-going children in developing countries.

Made from robust, child-friendly polymers, Tutudesks provide children with their own long-life workstations throughout their school years.



Agricultural programmes

During FY18, community training was conducted in six local villages, with a total of 129 people trained in coffee husbandry and quality control. Six model solar dryers for coffee processing were built. Terms of reference were developed for coffee and fresh produce farmers. An external resource was invited to bid for this exercise.

The focus during FY18 was on the continuing the coffee husbandry initiatives. This involved development of farmer training plans, consultation with government officials, commercial enterprises and preparation for a pilot project which will begin in FY19.

Health programmes

A community health outreach programme is in effect to improve the health and wellbeing of local communities. During FY18, the following activities occurred:

- Obstetrics training at the Bulolo Health Centre
- Assisted the Department of Health in the administration of polio vaccinations
- Routine health centre visits and health patrols
- Community medical assistance

The Wau Health Centre was assisted in a maternal and child health patrol at the Kaindi clinic. Actions included immunization of 947 children and antenatal examinations for mothers.

Hidden Valley has commissioned an overseas organisation, with a presence in Papua New Guinea, that specialises in establishing sustainable health facilities in challenging jurisdictions. The organisation will work with Harmony and other stakeholders to develop a five-year plan for an improved health facility in Wau.

Community infrastructure programmes

Water supply projects, which began in FY17, were completed in FY18. These projects benefit all remaining villages funded by the Benefit Sharing Agreement Trust.

Harmony is also contributing towards maintenance of critical sections of the Lae-Bulolo highway, the grading of an alternative road access to Wau, as well as Wau Hospital's unpaid electricity accounts and the Lae-Bulolo-Wau leg of the Rugby League World Cup tour.

Corporate social investment

Our corporate social responsibility policy recognises the need for socio-economic investment in South Africa and Papua New Guinea, starting with our host communities. Harmony's corporate social investment programme focuses on:

- education
- socio-economic advancement projects
- arts, culture, sports and recreation

In selecting projects and compiling our corporate social investment strategy, we conduct research, consult with communities to understand their need and requirements, and engage with various municipal structures.

In FY18, Harmony spent:

- R15 million or US\$1.2 million (FY17: R11 million; US\$0.8 million) on corporate social responsibility projects in South Africa
- R2 million or US\$0.1 million (FY17: R3 million; US\$0.2 million) on corporate social responsibility projects related to Hidden Valley

Preferential procurement

At Harmony, we recognise that a resilient supply chain, supported by local business participation, is necessary in terms of shared value. By making procurement opportunities available to our local businesses, we support the development of local economies, as well as the creation of local employment and poverty alleviation, while Harmony benefits from competitive and reliable local supply.

Preferential procurement is a key focus area in support of economic growth within the district municipalities, provinces and associated communities in which Harmony

operates. Preferential stakeholders can leverage Harmony's procurement opportunities in the establishment of sustainable enterprises.

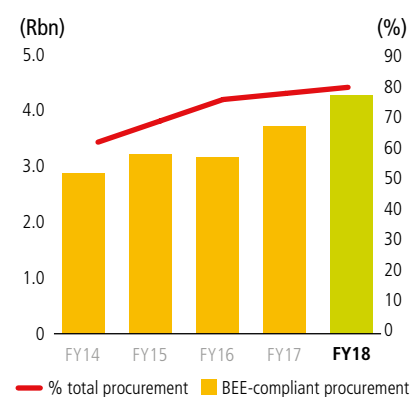
South Africa

Our preferential procurement strategy promotes expenditure with companies recognised as black economic empowerment entities by the Mining Charter.

In FY18, procurement expenditure with black economic empowerment entities was R5.1 billion or US\$398 million (FY17: R4.4 billion or US\$323 million), which is equivalent to 80% (FY17: 78%) of total discretionary spend. In addition, Harmony returned R1.8 billion (US\$140 million) to our host communities while we procured R15 million from 100% black women-owned companies. For further information see our video

Advancing the community.

South Africa: Annual BEE-compliant procurement



South Africa: Our performance in relation to the Mining Charter's black economic procurement targets as a percentage of total spend:

Category	Mining Charter target	FY18*	FY17*	FY16*
Capital goods	40	75	78	81
Services	70	79	80	79
Consumables	50	82	78	76

* Calculation is based on Harmony's financial year.

SOCIO-ECONOMIC DEVELOPMENT CONTINUED

Papua New Guinea

As agreed with government authorities (local, regional and national), landowners and communities, we contract local companies wherever possible. Supply expenditure by Harmony in FY18 amounted to R2.98 billion or US\$233 million (FY17: R2.7 billion or US\$198 million) of which R1.6 billion or US\$126 million (FY17: R1.0 billion or US\$75 million) was spent in Papua New Guinea. Of this amount, R1.1 billion or US\$85 million (FY17: R725 million or US\$53 million) was spent in Morobe Province on goods and services. Harmony awarded contracts to local landowner companies for catering, fuel haulage, general freight, plant hire, security, labour hire, cleaning, and rehabilitation and bus services.

Enterprise and supplier development

South Africa

Harmony has established the Harmony Leano and Phakamani funding initiative, which focuses on the development of small, medium and micro enterprises (SMMEs) within our mining communities. Harmony provides financial and non-financial support to these enterprises. The fund and related support initiatives are managed by Phakamani and Tsys. Since inception, Harmony's visibility in host communities has increased significantly and the Leano initiative has approved 96 loans with a total value of R17 million and has supported 35 SMME enterprises. In all, 35 women and 39 youth entrepreneurs are being assisted.

Case study: Golden Goose

Welkom-based Golden Goose Catering and Cake Decorating, run by Rethabile Gladys Maimane, was established in 2003 for the manufacture of motoho (a sorghum beverage), among other products and services. Harmony has assisted Golden Goose by funding a reverse osmosis plant, equipment and premises at a cost of R2 million (US\$0.2 million).

Case Study: Structured engagements with businesses in host communities

Supplier days and small, medium and micro enterprises (SMME) Indabas are engagement sessions for SMMEs in our host communities aimed at exposing them to opportunities within Harmony and providing a platform for SMMEs to share experiences in dealing with Harmony. Harmony further engages with these SMMEs individually to determine their suitability and readiness. Once confirmed ready and compliant, they are presented with more details on identified opportunities and guidance. Those SMMEs that are not procurement-ready are referred to Harmony's enterprise and supplier development department for assistance and coaching.

SMME Indaba

SMME Indabas are held annually. They are aimed at creating a mutual dialogue with SMMEs on challenges faced on a day-to-day basis and possible interventions required to make it possible for such businesses to access opportunities at Harmony, without compromising our policies and procedures. On 26 March 2018, Harmony held its first SMME Indaba for SMMEs in Soweto and neighbouring townships. This ground-breaking event, held at the Council Chambers of the City of Johannesburg Municipality, was attended by 199 SMMEs, making it a great success. The session was hosted by councillors from the City of Johannesburg and was opened by the General Manager: Doornkop, Mr. Seromo Mofokeng.

One of the outcomes of the SMME Indaba held in Soweto was a proposal for training for 25 SMMEs which had been identified by Harmony. Milani Nande Recruitment and Trading, a 100% black woman-owned company in Soweto, was appointed to conduct the training. Among the success stories were Elicidor Trading, which was awarded a tender valued at approximately R14 million for the construction of the perimeter wall around the Doornkop plant and Barolong Trading Enterprise which was selected to provide maintenance services at Doornkop. Barolong presented solutions to the challenges facing emerging enterprises, including marketing.

Supplier days

Supplier days are structured engagement sessions aimed solely at registered businesses located in Harmony's host communities with the aim of exposing them to procurement and development opportunities and engagement processes. As an enabler, Harmony shares our procurement calendar with these registered businesses, including information on upcoming procurement opportunities and on contracts that will terminate within 12 months. These sessions are aimed at assisting registered SMMEs based in our host communities in preparing their bids. During FY18, Harmony hosted four supplier days, the first at Doornkop, covering Soweto and its neighbouring townships, the second at Joel, covering Masilonyana, a local municipality located on the south side of Welkom, the third at Kalgold in North West Province, and lastly, at Kusasaletu covering the Merafong Local Municipality. The following is a summary of the four events:

Supplier days	Doornkop (Soweto – Regions D and C)	Joel (Masilonyana)	Kalgold (Ratlou)	Kusasaletu (Merafong)
No of SMMEs participating	46	20	33	63
One-on-one engagements	17	9	9	15
FY18 spend with 100% black-owned SMMEs	R63 million	R36 million	R6 million	R32 million

In FY18, boosted by our hosting of the supplier days, Harmony spent about R137 million with 100% black-owned companies at these four operations. Harmony aims to attract and sustain participation by more businesses based in our host communities.

Papua New Guinea

In line with Hidden Valley's current memorandum of agreement, Harmony continues to offer business development opportunities to landowners. Similar opportunities are expected to be available with the proposed development of the Wafi-Golpu project.

Sustainable human settlement initiatives

Harmony makes land available to provincial and local governments for the development of integrated human settlements. On the West Rand, land valued at R7 million in Mohlakeng Extensions 13 and 14 was donated to the province of Gauteng.

An updated housing programme, based on government's breaking new ground housing strategy, aims to promote an integrated society by developing sustainable human settlements and quality housing within a subsidised system for various income groups.

In support of the housing project, an industrial development initiative with local stakeholders is underway. Harmony will lease land adjacent to the housing project for the establishment of a motor industry-related industrial hub and thus provide income-generating opportunities for the area.

In addition, existing mine houses are sold to employees at nominal prices. To assist with affordability, a pension-backed loan scheme is being facilitated by the company. To date, more than 3 550 houses have been sold through this scheme, which is open to all employees.

In the Free State, Harmony is funding three spatial development frameworks in conjunction with the respective municipalities, including the Masimong-Thabong, Virginia core area and Merriespruit spatial development frameworks. The frameworks aim to include mining infrastructure and mine housing in the municipal areas. These initiatives will create home-ownership options for employees and job creation for the communities.

Harmony also makes 'social leases' available to businesses and other organisations, including redundant mine buildings that are rented at nominal rates to SMMEs and charitable organisations. The buildings are also donated to schools and orphanages.

Public safety

The social and ethics committee oversees public safety on behalf of the board. No major incidents occurred during the year. Primary risk areas include road/transportation incidents, radiation exposure and dust pollution associated with our operations.

Tailings dam dust management

Dust from Harmony's tailings dams could pose a nuisance to local communities during the dry winter season, exacerbated by excessive winds, droughts and the generally dry environment.

Tailings dam dust is actively monitored and managed by Harmony. Procedures include spraying and vegetation. In the Free State, 10 000 trees have been planted on the Freddie's 9 and Merriespruit tailings facilities. Planting of another 20 000 trees on each facility is planned for FY19.



● Papua New Guinea – agricultural programme

ENVIRONMENTAL MANAGEMENT AND STEWARDSHIP



We acknowledge that mining by its very nature impacts on the environment, yet we remain committed to eliminating, mitigating and remediating where possible our impacts as we aspire to leave a net positive legacy wherever we operate. Excellence in environmental performance is essential to our business success.

ENVIRONMENTAL MANAGEMENT IS IMPORTANT

We are aware that our activities and processes could have a negative impact on the natural environment in which we operate. We therefore accept responsibility for preventing, mitigating, managing and minimising these impacts.

OUR APPROACH

We aim to manage our environmental impacts, related risks and liabilities, and to comply with environmental legislation as responsible stewards, upholding a culture that shares knowledge and experience within and outside our group.

Our social and ethics committee oversees Harmony's environmental strategy and performance while the executive responsible for the sustainable development and environmental leadership teams motivates environmental improvement strategically at group level. General managers are accountable for environmental management at each operation in terms of annual environmental management plans that identify opportunities for improvement.

Our environmental strategy is supported by our board-approved environmental policy, available at www.harmony.co.za/sustainability/governance#policies. Operations are guided by technical and performance standards, which are incorporated into environmental management systems and implemented in line with ISO 14001. Our commitment to responsible environmental stewardship and sustainable mining and closure is outlined in this policy. Environmental management programmes include detailed closure plans for each operation within five years of planned closure to expedite beneficial post-mining land use and sustainable community livelihoods.

In South Africa, by year-end, seven of our mining operations and five of our processing plants had been certified in terms of ISO 14001.

HIGHLIGHTS



FY18

- **Continued significant investment in environmental management of R199 million (US\$15.5 million)**
- 5ML recycling plant installed at Doornkop generating potable water resulting in a **67% saving in its water usage**
- **"A" listings for performance and reporting on climate change and water** from Carbon Disclosure Project (CDP)
- At Hidden Valley, terms of environmental **permits renegotiated with regulator for single permit and improved regulatory framework**
- The Wafi-Golpu Joint Venture **submitted environmental impact statement for Wafi-Golpu project** to Conservation and Environment Protection Agency
- **Deep sea tailings placement chosen as preferred tailings management method** for Wafi-Golpu project

All the South Africa operations are either ISO 14001 certified and/or operate in compliance with this standard. Continual improvements are noted year on year. The Joel, Target, Harmony One, Central, Doornkop, Kusasaletu and Great Nologwa plants were recertified in accordance with the International Cyanide Management Code in FY18, illustrating the responsible environmental practices being applied in relation to cyanide management.

In Papua New Guinea, Hidden Valley's environmental management plan is aligned with the ISO 14001 standard and all new employees receive environmental awareness training, which is reinforced by leadership training courses and monthly initiatives. During FY18, Hidden Valley negotiated an amended single environmental permit with the regulator, making the implementation of the permit and the application of the controls simpler and more effective.

Environmental legislation

South Africa

Our activities are regulated by, among others, the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002), the National Environmental Management Act, 1998 (Act No 107 of 1998), the National Water Act, 1998 (Act No 36 of 1998) and the National Nuclear Regulator Act, 1999 (Act No 47 of 1999). Environmental management programmes for each operation are approved by the Department of Mineral Resources.

During the period under review, Harmony continued to engage together with the Minerals Council South Africa (previously the Chamber of Mines), the Department of Environmental Affairs regarding the Financial Provision Regulations under the National Environmental Management Act. Draft regulations were published in November 2017.

The Department of Environmental Affairs has recognised the challenges of the current 2015 Regulations and that certain of the conditions are impractical, and has agreed to extend the period for implementation until February 2020, during which the challenges identified will be resolved.

In November 2015, a draft Carbon Tax Bill was published for public consultation. At the time of its publication, it was believed it would take effect by January 2017. However this timeline has since been moved to January 2019.

It is understood that Harmony may be cost neutral until 2020. Energy is a significant input into our mining and processing operations with our principal energy sources being electricity. It is likely that the proposed carbon tax will increase the cost of electricity at our operations beyond 2020.

In order to facilitate the carbon tax legal regime and to provide for greater regulation of greenhouse gas emissions outside of the carbon tax, the Department of Environmental Affairs has initiated the implementation of a mandatory greenhouse gas reporting system, for certain identified data providers. In addition, the Department of Environmental Affairs has published the Climate Change Bill for public consultation in response to the international commitments made under the 2016 Paris Agreement on Climate Change. It aims to address climate change in the long-term by aiming for a climate resilient and low carbon economy in South Africa. Harmony's contribution to the conversation with the regulator aims to ensure that there are no overlaps in the various legislation.

Papua New Guinea

Water extraction and waste discharge for mining projects are regulated by applicable environmental legislation issued by the Conservation and Environment Protection Authority.

PERFORMANCE FY18*

Relevant GRI indicator: G4-EN31

We spent a total of R199 million (US\$15.5 million) (FY17: R74 million; US\$5.5 million) on our environmental portfolio in FY18 as follows:

South Africa

- R71 million (US\$5.6 million) (FY17: R54 million; US\$3.9 million) on environmental control implementation
- R86 million (US\$6.7 million) (FY17: R80 million; US\$5.9 million) on various rehabilitation projects

Papua New Guinea

- R24 million (US\$1.9 million) (FY17: R21 million; US\$1.5 million) on environmental control implementation
- R18 million (US\$1.4 million) on an environmental impact study related to Wafi-Golpu (Harmony's share of 50%)

Harmony's environmental stewardship and management activities are aligned, directly and indirectly, with the following Sustainable Development Goals:



* All figures presented exclude Moab Khotsoeng unless otherwise stated.



● Bio-energy and rehabilitation project

ENVIRONMENTAL MANAGEMENT AND STEWARDSHIP

CONTINUED



● Bio-energy and rehabilitation project



● Bio-energy – Sorghum project



● Bio-energy – Sugar beet

ENVIRONMENTAL INCIDENTS

Relevant GRI indicator: G4-EN24

We monitor, report and remediate environmental incidents, including direct or indirect discharges of water beyond our mining area in terms of environmental management plans. Environmental incidents are classified on a scale from 1 to 3 and we report incidents at level 3 (from serious medium-term environmental effects to significant impacts on sensitive species, habitats or ecosystems).

In FY18, we reported three level 3 incidents in South Africa. No significant environmental incidents were recorded in Papua New Guinea.

Location	Date	Description	Steps taken in mitigation
Central Plant	Q2 FY18	Process water spillage from broken pipeline. Event was localised and contained with no environmental impact	Spillage was localised and contained, hence no further remedial actions were necessary
Kusasaletu	Q3 FY18	Overflow of process water dam flowing into local tributary due to flash floods and depleting holding capacity of water dam	Water samples were taken from the local tributary. No significant impacts were recorded.
Kusasaletu	Q3 FY18	Spillage of sewage onto surrounding land. The affected area was small and localised with immediate remedial measures implemented	The sewage pump was repaired including minor changes to the system were made to avoid repeat of incident

REHABILITATION, LAND MANAGEMENT AND ENVIRONMENTAL CONSERVATION

Relevant GRI indicator: MM1

We acknowledge that we must rehabilitate the land impacted by our mining and mining-related activities in order to ensure sustainable post-mining land use. Rehabilitation ahead of closure is therefore included in planning throughout the life of mine. The necessary rehabilitation funding mechanisms are in place and, where feasible, infrastructure is refurbished for alternative use. As only a small proportion (14%) of the land covered by our mining rights has been disturbed by mining, opportunities for progressive and concurrent rehabilitation are limited at this stage. Our focus over the past two years has been to rehabilitate decommissioned shafts which have been linked to ingress by illegal miners. Over the past year, we completed a further seven shafts and are planning to complete the remaining five decommissioned shafts by the end of FY19. In addition, Harmony is in the process of demolishing and rehabilitating two decommissioned gold plants, which will be completed by the end of December 2018.

Rehabilitation of tailings dams is a key priority for Harmony with rehabilitation taking place on the following sites:

- Welkom
- Virginia
- Kalgold

Reclamation of waste rock dumps is progressing well with the following dumps being reclaimed:

- Kalgold
- Kusasaletu
- Target 2
- Tshepong
- Nyala
- ARM 7
- Saaiplaas 3

Land rehabilitation liabilities

		FY18	FY17	FY16	FY15	FY14
South Africa	(Rm)	1 2 919	2 180	2 170	2 210	2 209
Papua New Guinea	(Rm)	1 336	1 391	826	675	795
Total	(Rm)	4 255	3 571	2 933	2 796	2 708
	(US\$m)	308	166	150	230	255

¹ Includes Moab Khotsoeng liability of R640 million

South Africa

Our programme to rehabilitate decommissioned operations has continued since FY10 to reduce environmental liability and eliminate potential safety and health risks. During the course of the past year, we demolished a further seven shafts. To date, 45 shafts have been demolished and rehabilitated in the Free State.

In FY18, the total rehabilitation liability for our South African operations was R2.9 billion (US\$210 million) (FY17: R2.2 billion; US\$166 million), which is fully funded. The predominant reason for the increase in the rehabilitation liability is the acquisition of the Moab Khotsoeng operations, which include two operating shafts, two metallurgical plants (uranium and gold), a tailings storage facility, mine services and mine accommodation.

Harmony has acquired the liability of AngloGold Ashanti as it relates to the Klerksdorp, Orkney, Stilfontein and Hartbeesfontein (KOSH) Basin. In this acquisition, Harmony has made provision for post closure management of the KOSH Basin. The shaft operates for the purpose of dewatering the KOSH groundwater basin to ensure that Moab Khotsoeng and Kopanang (Village Main Reef) continue to have access to underground working.

The Moab Khotsoeng transaction included acquisition of the Nuclear Fuels Corporation of South Africa (NUFCOR), which processes the ammonium diuranate stream from the South Uranium Plant, a zero effluent facility. The uranium oxide produced by the plant is sold on international markets.

Papua New Guinea

A detailed biophysical rehabilitation and mine closure plan for the Hidden Valley operation was completed. For accounting purposes, an updated financial provision for unplanned closure as at 30 June 2018 has been made and an estimate for closure at completion of stage 6 has also been prepared.

BIODIVERSITY, LAND MANAGEMENT AND CONSERVATION

Relevant GRI indicators: G4-EN12, G4-EN14, G4-EN31, MM1 and MM2

South Africa

All long-life South African sites have biodiversity management plans, which are implemented either through their respective mine closure plans, environmental management plans or specific biodiversity action plans. To ensure compliance to such, numerous environmental projects are being implemented throughout our operations in line with the sustainable development goals of the United Nations.

Biodiversity

Aliens programme: An alien invasive plant eradication project has been implemented to minimise the continued growth and infestation of alien species, to ultimately mitigate and eradicate such plants. Areas of infestation are first mapped and then divided into smaller management units to enable prioritisation and appropriate planning. To date, Harmony has cleared more than 1 300ha.

In addition, Harmony has had preliminary engagement with the Department of Environmental Affairs regarding their Green Business Programme. Its aim is to eradicate alien invasives for the benefit of improving South Africa's biodiversity, water security, climate change, sustainable livelihoods and to seek to develop small to medium enterprises.

Conservation programme: During the course of this year, Harmony will undertake further studies in order to complete the proposed Lesser Flamingo Conservation Project north of Welkom. The project design and strategy for the construction of a Lesser Flamingo bird island will be done in collaboration with the local municipality and non-profit organisations.



● Sorghum on tailings



● Process of rehabilitation



● Bio-energy and rehabilitation project

ENVIRONMENTAL MANAGEMENT AND STEWARDSHIP

CONTINUED



● Bio-energy and rehabilitation project



● Bio-energy and rehabilitation project



● Bio-energy and rehabilitation project

Land management initiatives:

Kalgold aggregate production community project:

Kalgold has created a broad-based black economic empowerment consortium to crush waste rock material for aggregate production. Working in partnership with the local community, the consortium crushes, screens and stockpiles crushed material for collection by third parties. Reclamation of the Kalgold rock dump began in FY18. To date, 6 660 tons have been crushed and an additional jaw crusher, purchased by the consortium, will be delivered within a few months to increase the volume processed.

The local community will have a 10% free carry in this project and employees 5%. This project addresses the aspect of land management. By reclaiming the rock dump, we will liberate the land from its current state and instead create an opportunity for alternative land uses that contribute to conservation.

Biodiversity

Final-end land use

Harmony is targeting four applications as part of its socio-economic development strategy and these have been integrated into our social and labour plan commitments:

- Agriculture and agri-processing projects at Doornkop, Moab Khotsoeng and Kusasaletu
- Alternative energy projects including bio-energy and solar projects
- Conservation initiatives
- Industry applications

By way of example:

Doornkop agricultural project:

A vegetable project is in the process of being constructed and is using the excess potable water from the Doornkop water treatment plant. Refer to [Socio-economic development](#).

Papua New Guinea

Hidden Valley is not in a biodiversity-protected area but five species on the International Union for Conservation of Nature Red Data List are found in the vicinity of the mine. There is no evidence that the mine has affected these critical habitats. The five species include tree kangaroos, nectar bats, harpy eagles and long-beaked echidna, which are all not endemic to the Hidden Valley area.

For the Wafi-Golpu project, block cave mining has been selected as the optimal

underground mining method. This selection will reduce the surface footprint of the project in comparison to open pit mining and large-scale sub-level cave underground mining and significantly reduce the amount of waste rock generated by the project.

A further key measure to manage the impacts of the Wafi-Golpu project has been the selection of deep sea tailings placement as the preferred tailings management method. This decision is based on extensive baseline oceanographic studies conducted over the past 18 months as well as trade-off studies assessing deep sea tailings placement compared to terrestrial tailings disposal alternatives.

Community consultation and engagement with various stakeholders groups is significant in informing our position on stakeholder engagement. The Wafi Golpu Joint Venture executives and community affairs team ensure frequent dialogue on the deep sea tailings placement studies with the coastal communities, national and provincial politicians, Wafi Golpu employees and executives of the landowner associations. Several sessions were held in Port Moresby, Lae and Wafi.

Harmony and Newcrest, partners in the joint venture, have engaged the Sustainable Minerals Institute (part of the University of Queensland) to review all terrestrial tailings management options completed to date to confirm sufficiency and rigour in terms of the approach and process followed.

During FY18, an updated feasibility study for the project was completed and application made for a special mining lease and associated regulatory approvals.

Key measures proposed to manage the impacts of the Wafi-Golpu project on the terrestrial ecology include limited vegetation clearing, the preservation of vulnerable flora species as well as measures to control weeds and pests. Extensive baseline studies have been completed to inform the project's environmental impact statement.

ENERGY MANAGEMENT – OPTIMISING OUR ENERGY USE, REDUCING OUR CARBON EMISSIONS

**Relevant GRI indicators: G4-EN3, G4-EN5
and G4-EN6**

Harmony endeavours tirelessly to reduce energy consumption and greenhouse gas emissions, adapt to climate change and diversify our energy mix by:

- promoting energy efficiency at our deep-level mines in South Africa
- optimising and rebalancing our asset portfolio
- promoting an alternative energy mix
- aligning our rehabilitation programme with the green energy agenda

Total energy use in FY18 was 2 548 721MWh (FY17: 2 629 321MWh), a decrease of 3%. This is attributed to numerous energy saving initiatives (see renewable energy on pages 89 and 90 for further information) and to the downscaling of our Unisel operation.

The corresponding energy intensity level was 0.11MWh/tonne treated (FY17: 0.13MWh/tonne). However, our energy consumption

has declined by 11% in the past five years and our intensity usage by 20%, which is in line with the annual reduction targeted. These declines have in turn reduced our greenhouse gas emissions.

South Africa

Generally, Harmony consumes energy indirectly in the form of electricity purchased from the national power utility, Eskom, which uses coal-fired power stations. We therefore have little scope for large-scale purchases of energy from renewable sources. Eskom's electricity tariffs have risen steadily since 2008 and, given the relatively significant contribution to operating costs, increases exceeding 8% have an impact on the sustainability of our operations. We are therefore intent on reducing electricity consumption.

Our energy efficiency initiatives focus on efficient mine cooling, compressed air, water management and ventilation, as well as an improved energy mix with emphasis on sustainable renewable energy, particularly solar power and bio-energy in the short term. We have improved our capacity to generate solar power and this has helped decrease our power consumption and energy use intensity.

Papua New Guinea

Our operations are designed to be energy-efficient. As Papua New Guinea's grid power is generated predominantly by renewable, hydro-power, this results in much lower emission intensities at Hidden Valley, which has used 60% of grid power, on average since 2011. The proportion of grid power used in FY18 was 66% (FY17: 58%). In FY18, 30 900MWh of diesel-generated electricity was consumed (FY17: 38 800MWh). Although Hidden Valley has experienced interruptions to its supply of hydro-power, negotiations with the current supplier have resulted in an understanding that Harmony will receive preferential supply for Hidden Valley.

To ensure a stable, base-load power supply, the Wafi-Golpu project is planning to use self-generated power using intermediate fuel oil as a fuel. Alternative options continue to be assessed.

Energy consumption and consumption intensity

Energy consumption (MWh)	FY18	FY17	FY16	FY15	FY14
South Africa	2 458 423	2 537 944	2 542 463	2 608 157	2 756 029
Papua New Guinea	90 298	¹ 90 380	54 976	59 218	60 414
Harmony total	²2 548 721	¹2 629 321	2 597 439	2 667 375	2 816 443
Consumption intensity (MWh/tonne treated)					
Harmony	0.11	0.14	0.13	0.15	0.15

¹ Increases recorded in FY17 in Papua New Guinea electricity consumption and for Harmony as a whole, a result of acquisition in full of Hidden Valley, which is now included at 100% versus 50% in preceding years

² Includes Papua New Guinea diesel consumption used to produce electricity (30 931MWh)



● Tshepong operations – Phakisa

ENVIRONMENTAL MANAGEMENT AND STEWARDSHIP

CONTINUED

Noteworthy action: Managing our electricity consumption

SOUTH AFRICA

Energy supplied by Eskom was 0.38% lower in FY18 than the previous year, with demand peaking at 35 613MW.

Supply status

Eskom generates approximately 95% of the electricity used in South Africa and approximately 45% of the electricity used in Africa. The utility generates, transmits and distributes electricity to industrial, mining, commercial, agricultural and residential customers and redistributors. Since December 2017, there has been increased use of emergency energy reserves to meet operating requirements during evening peak periods.

During FY18, there was less pressure on electricity supply in South Africa than in previous years, with fewer interruptions to the power supply (or load shedding). Consequently, supply improved with the only incidents of load shedding occurring between 14 to 16 June 2018. However, supply of and demand for electricity remain very tight, especially during the peak evening period between 18h00 and 20h00.

Harmony participates voluntarily in the Eskom demand response programme to reduce electricity usage at these times. We have renewed our contract agreement with an energy service company to ensure that various load-clipping and load-shifting projects are sustained. We have also assisted by implementing new energy saving initiatives at our operations to reduce electricity demand during morning and evening peaks. Harmony benefits financially from this as well, as Eskom tariffs are more expensive during these periods. Currently, the risk of power outages is limited mainly to the evening.

The Integrated Resource Plan, an aspect of the national Integrated Energy Plan, was promulgated initially in 2011. It was, the government said at the time, to be a “living plan” with regular updates. However, there have been no official updates until now, although an early draft was presented by a former energy minister. The new draft plan allows for additional electricity generating capacity of 25 000MW, with no new nuclear, pumped storage or concentrated solar power. Instead, gas and wind power are to contribute more than half of this additional capacity. In terms of the new plan, coal-fired power generation will decline from current levels of more than 80% of all power generated to less than 50% by 2030.

Renewable energy

Forecasts are that renewable energy technologies, predominantly gas and wind-based, will grow further in coming decades, exceeding coal-based electricity by around 2030. Renewable energy will increasingly become a significant element in the country's electricity landscape.

Tariffs

Like all mining companies, Harmony is a major user of electricity, mostly supplied by South Africa's power utility, Eskom. Given rising electricity tariffs, energy makes up a significant and growing portion of our operating costs. The existing time-of-use tariffs, which are extremely expensive during winter months, were implemented to change the behaviour of end-users. Over time, this has escalated to an unacceptable winter to summer tariff ratio. While electricity tariffs per unit have increased by 5.3% on average for Harmony operations, owing to our efficient energy management plan, the effective increase in the overall electricity cost for our South Africa operations was just 0.47%.

Energy efficiency

Harmony has worked closely with Eskom to manage its electricity use. Eskom has offered incentives to customers to increase their consumption/demand outside of peak demand periods, when additional capacity is available. Energy consumption by our South Africa operations declined by 38 516MWh for FY18, compared to FY17, a result of various energy efficiency projects implemented during the course of the year.

Total measured cost savings resulting from these energy savings initiatives amounted to R85 million for FY18. New savings from these projects, based on a year-on-year comparison with FY17, amounted to approximately R42 million.

Direct and indirect energy consumption (MWh)

	% of total energy used		% of total energy used		% of total energy used		% of total energy used		% of total energy used	
	FY18		FY17		FY16		FY15		FY14	
South Africa										
Direct ¹	—		—		—		—		—	
Indirect ²	2 458 423	100	2 537 944	100	2 542 463	100	2 608 157	100	2 756 029	100
Total	2 458 423		2 537 944		2 542 463		2 608 157		2 756 029	
Papua New Guinea										
Direct ¹	30 931	34	38 839	41.9	14 010	25.5	10 355	17	18 354	30
Indirect ³	59 367	66	52 542	58.1	40 966	74.5	48 863	83	42 060	70
Total	90 298	100	90 380	100	54 976	100	59 218	100	60 414	100
Harmony										
Direct	30 931	0.001	38 839	0.1	14 010	0.5	10 355	0.4	18 354	1
Indirect	2 517 790	99.9	2 590 482	99.9	2 583 429	99.5	2 657 020	99.6	2 798 089	99
Total	2 548 721	100	2 629 321	100	2 597 439	100	2 667 375	100	2 816 443	100

¹ Diesel

² Non-renewable: coal-fired power stations (Eskom)

³ Renewable energy: hydropower-generated electricity

Addressing climate change by optimising our energy use

Relevant GRI indicator: G4-EC2

Harmony monitors the opportunities and risks presented by climate change, included in our mine closure plans, and communicates these to the Board throughout the year. Our climate strategy is then reviewed every year with a view to substituting and/or augmenting conventional electricity use (fossil fuel and grid energy) with renewable energy.

In line with our strategy (for the next five years) to adapt, conserve and move towards an alternative energy supply mix, we are reducing our grid-electricity consumption and greenhouse gas emissions with year-on-year and multi-year targets. To this end, we have implemented a suite of energy efficiency initiatives and closed carbon-intensive (high-energy) shafts. We plan to increase the use of green energy derived from hydropower, solar power and biomass.

To mitigate the risk of climate change, we have:

- rebalanced our asset portfolio: over the years we have closed several carbon-intensive operations as they have reached the end of their geological life
- decommissioned and sealed old mining shafts
- received environmental authorisations for three solar projects with final procurement processes currently being concluded.

Renewable energy

At present, Harmony is considering several renewable and alternate energy projects in South Africa:

- bio-energy project
- three 10MW photovoltaic power plants in the Free State – on Harmony-owned land

Our initiatives to reduce electricity consumption in Harmony improved the reduction energy consumption across the group by 21% since 2010.

Harmony collaborates with an energy saving company (ESCO) to enhance efficiencies at our South African operations, to assist with increasing operational efficiency, so reducing energy costs and ultimately ensuring that targeted energy savings are achieved.

The ESCO will help to ensure that savings are maximised and existing savings are maintained.

ENVIRONMENTAL MANAGEMENT AND STEWARDSHIP

CONTINUED



Year-on-year, the cost savings in actual electricity consumed were R36 million. Total measured cost savings resulting from implemented energy savings initiatives amounted to R85 million and R58 million valued added for maintaining the existing energy savings initiatives in FY18. Some of the savings were neutralised due to an increase in energy consumption for operational requirements.

Demand-side management is encouraged by Eskom with rewards for making more efficient use of tariffs. Initiatives to this end include scheduling of pumping, air compression, cooling, hoisting and ventilation at off-peak periods.

Projects funded by Harmony are sustainable in the long term, and include the use of energy efficient underground fans, managing the compressed air at refuge chambers and workplaces, installation of standalone compressors, accurate measurement of compressed air and online electricity consumption monitoring.

Projects that continued throughout FY18 included:

Solar procurement programme: The Department of Environmental Affairs has approved the construction of three 10MW solar energy plants at the Eland, Nyala and the Tshepong shafts. Harmony has set up

a steering committee comprising various specialists. A power purchase agreement was completed and an information memorandum document developed. Discussions were held with financiers and project developers. The bid was allocated to one of the tenderers. A final decision on a generation licence is required to proceed with the installation.

Energy management: All plant mills and shaft winders operate at off-peak periods to reduce electricity costs and decrease load during national high-demand periods.

Compressed air management: Installation of control valves on compressed air lines at a number of operations to reduce the flow of compressed air during periods of lower demand resulted in a reduction in electricity consumption by the compressors. We are also proactively managing compressed air leaks to avoid wastage. Compressed air piping was investigated and, where pipe sizes were inadequate, upgraded to supply sufficient volume of compressed air to workplaces while maintaining energy levels.

Refrigeration: At all of the production shafts where refrigeration has been installed, control measures have been implemented, based on the “cooling on demand” principle, considering ambient conditions and seasonal changes. Plant efficiencies are monitored to ensure maximum cooling reaches the workplaces at acceptable energy consumption levels.

Hoisting: At all the shafts, winder operations are monitored and ore extraction is managed to ensure that the winders could be stopped during the peak tariff periods. As a result, significant cost savings have been achieved, especially during high demand season when tariffs are high.

Ventilation: In the underground mines, ventilation is measured and analysed so that it can be switched off on surface and underground while maintaining required or improved ventilation at the workplaces. This has been completed at Target mine. Energy saving is realised by improving operational efficiencies.

Pumping: Control valves have been installed on water lines at a number of operations to reduce the flow of mine water during periods of lower demand.

As a result, electricity consumption by the pumps has been reduced. We are also proactively managing water leaks to avoid wastage. The pump efficiencies are monitored and the most efficient pumps are run during peak tariff periods if they cannot be stopped. Excellent savings were achieved and pumping costs were reduced.

Other initiatives

A dedicated effort to maintain the performance of demand-side management projects previously implemented was undertaken in FY18. These projects generated significant electricity cost savings.

A project to increase awareness of the importance of energy efficiency and opportunities for improvement has been implemented. The project entails increasing awareness through automated distribution of daily, weekly and monthly reports on various operational aspects such as the energy consumption of a site, efficiency of a system and performance of energy saving projects, among others. Regular monthly meetings are held with the main energy consumers and action lists are drawn up to assist with the awareness campaign and energy savings.

Noteworthy action

Papua New Guinea: reducing use of fossil fuels

Hydropower usage at Hidden Valley was lower in the past year due to poor supply reliability from the hydropower provider. However, since year end this has improved and plans are well advanced to enable the mine to access another third party supplier of hydropower.

The Wafi-Golpu project is being designed to exceed Papua New Guinean statutory requirements and to align with Australian and other international environmental standards. In terms of the feasibility study, all infrastructure is being designed to minimise power consumption. As part of the updated feasibility study, options for the self-generation of power are also being investigated.

Climate change and greenhouse gas emissions

Relevant GRI indicators: G4-EN15, G4-EN16, G4-EN17, G4-EN18 and G4-EN19

Harmony's Scope 1 and Scope 2 emissions in FY18 totalled 2 573 740t CO₂e (FY17: 2 623 607t CO₂e) with a corresponding intensity of 0.12t CO₂e/tonne milled (FY17: 0.135t CO₂e/tonne milled). Indirect emissions in South Africa, largely due to electricity purchased from Eskom, accounted for 95% of emissions. Direct emissions marginally increased (2.9%) as a result of Hidden Valley in Papua New Guinea coming into full production. In FY18, we decreased our Scope 1 and Scope 2 emissions by 2% (FY17: 0.5%).

In FY18, our total carbon emissions decreased by 2% (FY17: 5.62%) with a corresponding decrease in intensity, which averaged 0.14t CO₂e/tonne treated for the year (FY17: 0.179t CO₂e/tonne treated). At group level, absolute and intensity-based greenhouse gas emission reduction targets have been set for the five years from FY18.

Group carbon emissions

	FY18	FY17	FY16	FY15	FY14
Scope 1 emissions breakdown by source (CO₂e tonnes)					
Diesel	128 505	108 306	53 278	64 244	71 728
Explosives	2 135	1 953	1 838	1 748	2 079
Petrol	844	784	777	909	950
Total	131 483	111 043	55 893	66 902	74 758
Scope 1 emissions breakdown by source (%)					
Diesel	97.7	97.5	95.3	96	96
Explosives	1.6	1.8	3.3	3	3
Petrol	0.7	0.7	1.4	1	1
Total	100	100	100	100	100
Total scope 1, 2 and 3 emissions (CO₂e tonnes)					
Scope 1	131 483	111 043	55 893	66 902	74 758
Scope 2	2 442 256	2 512 565	2 580 600	2 686 401	2 745 005
Scope 3	439 551	445 033	615 456	686 233	661 515
Total	3 013 290	3 068 633	3 251 949	3 439 536	3 481 278
Total scope 1, 2 and 3 emissions (%)					
Scope 1	4	4	2	2	2
Scope 2	81	82	79	78	80
Scope 3	15	14	19	20	18
Total	100	100	100	100	100

Carbon emissions intensity

	FY18	FY17	FY16	FY15	FY14
Scope 1 emissions intensity by source (CO₂e tonnes/tonne treated)					
Diesel	0.0057	0.0055	0.0029	0.0036	0.0038
Explosives	0.0001	0.0001	0.0001	0.0001	0.0001
Petrol	0.00004	0.0004	0.0001	0.0001	0.0001
Total scope 1, 2 and 3 emissions intensity (CO₂e tonnes/tonne treated)					
Scope 1	0.0061	0.0057	0.0031	0.0040	0.0040
Scope 2	0.1090	0.1295	0.1428	0.1490	0.1458
Scope 3	0.0196	0.0229	0.0340	0.0380	0.0332
Total	0.1345	0.1581	0.1799	0.1910	0.1830

ENVIRONMENTAL MANAGEMENT AND STEWARDSHIP

CONTINUED

OPTIMISING WATER USE, LIMITING OUR IMPACTS

Relevant GRI indicators: G4-EN8, G4-EN9, G4-EN10 and G4-EN22

Our water strategy supports conservation and demand management, including optimisation of supply in regions such as Welkom, particularly to secure supply during a protracted drought, and for the sustainable development of the business and our host communities.

An important indicator for water use to Harmony is water used for primary activities. The total amount of water used for primary activities in FY18 was 15 473 478m³ with a resulting intensity of 0.69m³/tonne treated.

Across the group, Harmony has implemented a campaign to re-use process water and thus reduce our dependency on groundwater by 4.5%, while increasing the amount of water recycled.

Water use – measured

		FY18	FY17	FY16	FY15	FY14
Water used for primary activities	000m ³	¹ 15 473	18 125	15 083	15 752	16 502
Potable water from external sources	000m ³	12 646	12 486	13 854	13 132	13 915
Non-potable water from external sources	000m ³	2 872	² 5 638	1 229	2 620	2 587
Surface water used	000m ³	2 034	4 863	716	776	1 037
Groundwater used	000m ³	793	775	513	1 844	1 550
Water recycled in process	000m ³	40 435	41 112	38 821	38 338	24 531

¹ The values (unaudited) relating to 'water used for primary activities' for the past five years have been restated. This follows implementation of operational controls that affected application of the definition at Kusasalethu, resulting in an increase in the use of water for primary activities

² Increase in non-potable water consumption due to impact of drought on the Free State operations

Water used for primary activities – measured

		FY18	FY17	FY16	FY15	FY14
Intensity consumption	000m ³ /tonne treated	0.69	0.93	0.80	0.87	0.88
Water used for primary activities	000m ³	15 473	18 125	15 083	15 752	16 502

This has enabled us to continue to maintain a favourable water use intensity. Conservation of potable water is a priority, particularly in light of the recent impact of drought in South Africa and foreseeable drought patterns in future. Enhanced water awareness campaigns and water management initiatives, including recycling, among others listed below, were effective throughout FY18.

Noteworthy action

CDP reporting: Climate change and water reporting

CDP, the non-profit global environmental disclosure platform, has again acknowledged Harmony as a global leader in corporate sustainability. Harmony is included in the CDP's 2017 A List for climate and water. This is the second consecutive year in which we have been awarded an A for climate and water. Harmony was one of only 25 companies to score an A for climate and water in 2017. This achievement acknowledges our performance in mitigating and managing environmental risks, cutting carbon emissions and enhancing water stewardship. According to the CDP, the 2017 A List, which comprises 156 global companies, has been produced at the request of more than 800 investors with assets of over US\$100 trillion.

South Africa

In line with legislative requirements, integrated water-use licence applications were submitted to the authorities for each operation. Where water use licences have been received, Harmony has applied for amendments to take into account omissions, additional water uses and to clarify certain aspects. Where possible, Harmony continues to apply best practice in water management. Most of our operations are zero discharge mines.

Our strategy to reduce dependency on potable water, and to maximise our use of fissure and process water, began in 2013.

Water conservation strategy

Water balances have been used to model the likely effects of a protracted drought on our operations and continue to be used for this purpose with another likely drought period predicted for FY19. Part of the success in reducing our water-use intensity is attributed to less wastage but also reduced potable water use given recycling. Harmony installed two water treatment plants in Gauteng to treat fissure water to potable standards. This has had the added advantage of liberating potable water supply for other users, especially necessary during times of El Nino.

Harmony has thus begun implementing a third water treatment plant. The Free State operations are most likely to be affected by drought. In addition our strategy has focused on developing models from data received through our water balances to project future retreatment projects.

It is imperative that we continue to improve the efficiency of our water use in order to operate effectively under regulations that aim to reduce demand and consider the needs of community's access to potable water from the same source.

- **Water conservation in the Free State:**

In line with our strategy, Harmony has begun building its third water treatment plant, to be based in the Free State.

This will ensure security of water, reduce water consumption and assist with water conservation. The plant will treat 2.8ML of water a day and will save Harmony a further R3.2 million in water bills annually. The treatment projects will bring about a total saving of R5.6 million annually and reduce our potable water consumption.

- **Kalgold:** This operation is in a water scarce area, Kalgold's D-Zone pit deposition ensures water is available for production and the surrounding borehole network augments water needs when necessary. Modified plant and tailings storage facilities have maximised the recovery of water for reuse, process water dams have been reinforced to increase storage capacity and minimise overflows, and efficient flow meters and valves have been installed.

Water discharge

At Doornkop, we are licensed to discharge but the treatment plant has mitigated the need for this. Only in the event of excess water will Harmony discharge treated potable water into the Klipspruit.

The Kusasalethu operation has a water use licence permitting the discharge of water. We remain committed to optimising our water balance to achieve zero discharge.

Papua New Guinea

At Hidden Valley, compliance monitoring of water quality during the year showed that all dissolved metals and physicochemical parameters complied with regulatory criteria at the Nauti compliance point. The steep topography, high rainfall and low levels of evaporation pose significant water management challenges. The two main water management techniques are:

- controlled run-off of rainfall to prevent erosion and sediment entering the river system
- recycling of site water to limit the volumes of treated wastewater discharged into the environment

Most of the raw water required by Hidden Valley is drawn from Pihema Creek, and used in the process plant and related ore-processing activities. Although process water recycling is prioritised, the tropical environment creates a positive water balance thus, together with the requirement to minimise water storage in the tailings storage facility, there is a high rate of water discharge to the environment.

Hidden Valley treats all water to prescribed standards before it is discharged into the environment and the mine monitors any environmental impact on the receiving Watut River system. Quality assurance/control programmes have been implemented to monitor construction and operation of the waste dumps and tailings storage facility, including assessment of sediment and run-off control measures.



● Water monitoring programme – Kili Teke

ENVIRONMENTAL MANAGEMENT AND STEWARDSHIP

CONTINUED

Discharge of mine-related sediment into the Watut River has been reduced with continued focus on erosion control and sediment management. Lime dosing of treated water prior to discharge continues when required to control acidity and dissolved metal levels. At the sewage treatment plant, continuous operator training and use of real-time monitoring equipment has afforded a trend of improved compliance with permitted discharge criteria.

Acid mine drainage

Major sources of acid mine drainage include drainage from underground mine shafts and 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 at our South African operations.

Our water management strategy involves intercepting water before it is polluted underground. When there is a risk that rising water levels underground could hinder access to our ore reserves or those of other operations or harm the environment, water is pumped to surface. It is then consumed as plant intake.

Welkom is a water stressed environment and our environmental modelling confirms that there is no risk of a surface decant of acid mine drainage, currently or beyond end of life. There is therefore no material risk to surface and groundwater sources in Welkom.

Geohydrological studies confirm the same outcome for Kalgold while the geohydrology at Doornkop and Kusasalethu is far more complex, given the interconnected nature of mining operations in the vicinity. These operations participate in regional geohydrological and closure studies.

In Papua New Guinea, acid mine drainage can occur as a result of waste rock dumps and ore stockpiles that contain potentially acid-forming material. Environmental impacts are mitigated by the construction of engineered waste rock dumps and the 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 mine drainage impacts and enable us to formulate plans for longer-term reduction, mitigation and ultimately closure success.

OPTIMISING OUR USE OF MATERIALS

Relevant GRI indicator: G4-EN2

The primary materials consumed in conducting our mining activities and processes include the rock (ore and waste) we mine together with liquefied petroleum gas, grease, cyanide, fuels and lubricating and hydraulic oils.

Cyanide

Harmony used 23 339t of cyanide during FY18 (FY17: 21 000t). The increase in cyanide consumption was largely due to the greater volume of mined ore treated in FY18 – 22.4Mt compared to 19.4Mt in FY17.

Harmony is a signatory to the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (Cyanide Code). All of our major gold mining operations and most of our metallurgical plants have been certified compliant with the Cyanide Code.

Hidden Valley: Cyanide Code re-certification procedures have begun with an audit planned for the first quarter of FY19.

Materials used

	FY18	FY17	FY16	FY15	FY14
Rock mined: ore and waste (000t)	43 578	33 150	27 606	29 948	39 133
Ore mined (000t)	22 441	19 402	19 739	13 041	14 798
Waste rock recycled (000t)	3 690	4 668	3 964	6 647	7 058
Slimes recycled (000t)	9 772	6 559	6 131	5 987	5 933
Liquefied petroleum gas (t)	1	0.47	0.54	1.14	1.21
Grease (t)	426	121	384	54	87
Cyanide (000t)	23.3	21.0	18.0	14.3	14.7
Petrol and diesel (000L)	1 48 461	40 811	20 298	24 464	27 148
Lubricating and hydraulic oil (000L)	2 744	2 768	2 291	2 772	3 011

¹ 100% reporting of Hidden Valley from FY17. Production ramp up in FY18. Given the reduced availability of hydro-power, Papua New Guinea has had to rely on generators

MANAGING OUR EFFLUENTS AND WASTE

Relevant GRI indicators: G4-EN23 and MM3

Effective waste management is a priority and can reduce our environmental impacts and mitigate our environmental liabilities. An understanding of the actual cost of waste management enables us to plan effectively for new projects and mine closure. Practically, we maximise recycling and waste reduction during the life of a mine, and design to minimise waste and reclaim mineral waste (such as waste rock from dumps as aggregate) to curtail our total mining environmental footprint.

Internally, guidelines on mineral, non-mineral and hazardous waste materials are included in the environmental management systems implemented at all operations. We understand that waste management begins with initial generation and encompasses handling, storage and transport as well as recycling, treatment and/ or disposal.

Mineral waste

In FY18, 50.7Mt of mineral waste was generated from gold production (FY17: 38.4Mt), comprising 29.4Mt (FY17: 18.6Mt) of waste rock and 21.4Mt of tailings (FY17: 19.8Mt). The year-on-year increase in mineral waste was due to waste stripping of the cutbacks at Hidden Valley.

Tailings comprise 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 opencast operations producing greater volumes in general than underground operations. Tailings and waste rock are usually inert but rock close to the orebody may be associated with metals or salts if these are characteristic of the orebody.

As tailings contain impurities or pollutants, they are placed on tailings dams engineered to contain the slime in line with our water management programme.

The fines are also collected and deposited on the tailings. Water is collected from toe drains and penstocks, and channelled to return water dams where it is available for reuse by the plant.

In the process, cyanide is destroyed – it self-destructs on the tailings when exposed to light – but salts and heavy metals can enter groundwater and create a pollution plume. We monitor our groundwater as public safety assessments have found that these plumes (contaminant plumes) could be contained in the tailings storage or water management facilities.

Effective mineral waste management reduces the aesthetic and land use challenges of mining, particularly during closure, as well as the potential for water and air pollution while 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 Tswelopele reclamation initiative (Phoenix operation).

To protect employees, communities and the environment, we handle all chemically reactive or radioactive waste appropriately by:

- minimising the quantity of material stored 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

Hidden Valley's advanced waste management systems have generated positive feedback from stakeholders, particularly the tailings storage facility, the first large facility of this type to be operated successfully in Papua New Guinea.

Of note, at Hidden Valley, we have:

- completed extensive design for the biophysical aspects of mine closure
- agreed with the Conservation and Environment Protection Authority on a revised environmental permit

At the Wafi-Golpu project, deep sea tailings placement has been selected as the preferred tailings management option. This decision is based on extensive baseline oceanographic studies conducted over the past 18 months as well as trade-off studies assessing deep sea tailings placement compared to terrestrial tailings disposal alternatives.

Waste rock is oftentimes regarded as a resource to the aggregate industry. To this end, Harmony through its rehabilitation efforts and downstream beneficiation efforts, is re-purposing waste rock into aggregate at:

- Kalgold
- Welkom
- Doornkop

Many of these initiatives are developed to support local participation.

Non-mineral waste

In FY18, 16 939t of waste (plastic, steel, wood and paper) was recycled (FY17: 22 458t). Significantly less non-mineral waste is generated than mineral waste (less than 0.2%).

Plastics, steel, paper and timber generated by processing operations are produced in lesser volume than mineral waste. This non-mineral waste is managed by recycling or reuse, off-site treatment, disposal or on-site landfills. We ensure responsible storage, treatment and disposal of non-mineral waste. Group environmental standards for non-mineral waste management are integrated into existing ISO 14001 systems.

MINING CHARTER SCORECARD

We report on our performance in relation to the Mining Charter throughout this integrated report. The table below sets out our performance in relation to the specific requirements of the Mining Charter, as gazetted in 2010, and our progress in terms of the Mining Charter targets set in 2014.

A declaratory order issued by a majority judgement of the High Court of South Africa in April 2018 recognised the continuing consequences of previous black economic empowerment transactions.

The latest version of the Mining Charter (referred to as Mining Charter III) was gazetted by the Minister of Mineral Resources in September 2018.

Harmony, through the Minerals Council South Africa, is engaging with the Department of Mineral Resources on certain issues of concern and we are optimistic that we may reach an amicable solution.

For further information and progress related to the revised Mining Charter, see the Minerals Council's website, www.mineralscouncil.org.za.

PROGRESS AGAINST MINING CHARTER TARGETS

Relevant GRI indicator: G4-15

Although the latest version of the Mining Charter is yet to be finalised, our work in South African has continued towards

fulfilling our commitments, in line with the underlying spirit of the 2014 Mining Charter and our overall commitment to transformation.

The Mining Charter serves as a guide to the industry, focusing the transformation journey on several key elements. A template designed by the Department of Mineral Resources enables mining companies to provide the information necessary to assess their success in achieving key Mining Charter targets.

The table below summarises our performance against the targets for each pillar of the Mining Charter's for the calendar year ended 31 December 2017.

Mining Charter scorecard for calendar year 2017 (January – December)

Compliance target		Target	Weighting	Progress	Score
1. Reporting					
Has the company reported its level of compliance with the Mining Charter for the calendar year?	Report annually	Yes	Yes / No	Yes	Yes
2. Ownership					
Minimum target for effective ownership by historically disadvantaged South Africans	Meaningful economic participation Full shareholder rights	26%	Yes / No	More than 26%	Yes
3. Housing and living conditions					
Conversion and upgrading of hostels to attain an occupancy rate of one person per room	Occupancy rate of one person per room	100%	Yes / No	100%	Yes
Conversion and upgrading of hostels into family units	Family units established (as part of mine community development)	Yes	Yes / No	No	No
4. Procurement and enterprise development					
Procurement spend with black economic empowerment entities	Capital goods	40%	5%	76%	5%
	Services	70%	5%	76%	5%
	Consumable goods	50%	2%	82%	2%
Multinational suppliers contribution to a social fund	Multinational supplier contributions	0.5%	3%	0%	0%
5. Employment equity					
Diversification of workplace to reflect the country's demographics and attain competitiveness	Top management (board and executive management)	40%	3%	57%	3%
	Senior management	40%	4%	51%	4%
	Middle management	40%	3%	52%	3%
	Junior management	40%	1%	64%	1%
	Core skills	40%	5%	68%	5%

Mining Charter scorecard for calendar year 2017 (January – December) continued

	Compliance target	Target	Weighting	Progress	Score
6. Human resource development					
Development of the requisite skills, including support for South African-based research and development initiatives intended to develop solutions in exploration, mining, processing, technology efficiency (energy and water use in mining), beneficiation as well as environmental conservation	Expenditure on human resource development as percentage of payroll	5%	25%	6%	25%
7. Mine community development					
Conduct ethnographic community consultative and collaborative processes to delineate community needs analysis	Up to date project implementation	100%	15%	65%	10%
8. Sustainable development and growth					
Improvement of the industry's environmental management	Implementation of approved environmental management plans	100%	12%	100%	12%
Improvement of the industry's mine health and safety performance	Implementation of tripartite action plans on safety and health	100%	12%	100%	12%
Use of South African-based research facilities for the analysis of samples across the mining value chain	Percentage of samples analysed in South African laboratories	100%	5%	100%	5%
				100%	92%

CORPORATE GOVERNANCE

“The board subscribes to the principles of good corporate governance”

Introduction

Harmony's board of directors (the board) subscribes to the principles of good corporate governance. The board supports the definition of corporate governance as being the exercise of ethical and effective leadership towards the achievement of the following governance outcomes:

- Ethical culture and responsible corporate citizenship
- Good performance and value creation
- Effective control
- Legitimacy

These objectives form the foundation and framework for the corporate governance report of the board as set out below.

The King IV Report on Corporate Governance for South Africa, 2016 which was launched on 1 November 2016 (King IV) has elevated the call on boards and other governing bodies to apply their own minds to the appropriate practices in each organisation to illustrate the application of the governance principles as contained in the Code on Corporate Governance that is included in King IV. Discussed below are the practices within Harmony that the board believes confirm Harmony's application of the King IV principles. Considering that the core messages of good corporate governance have remained mainly unchanged throughout the various King reports to date, together with the Harmony board's long-standing commitment to good corporate governance, the board is comfortable that sufficient practices are and have been in place to promote Harmony's reputation as an ethical, reputable and legitimate organisation and a responsible corporate citizen.

In an attempt to focus on high-level, material practices and detail, additional information supporting specific matters is cross-referenced and linked in the report where appropriate.

Ethical culture and responsible corporate citizenship

Ethical leadership

The board fully appreciates that it has to lead by example. Each member of the board is therefore expected to at all times

exhibit the characteristics of integrity, competence, responsibility, accountability, fairness and transparency in his or her conduct. Collectively, the board's conduct, activities and decision-making are characterised by these attributes, which also form part of the regular assessment of the board and individual directors' performance.

The board charter elaborates on the standard of conduct expected from board members. In addition, the board policy on the declaration of interests not only limits the potential for a conflict of interest but also ensures that, in cases where conflict cannot be avoided, it is properly disclosed and proactively managed within the boundaries of the law and principles of good governance.

Organisational ethics

The board sets the group's approach to ethics. Oversight and monitoring of organisational ethics is the mandated responsibility of the social and ethics committee which fulfils this role on behalf of the board. Details of the arrangements for governing and managing ethics, key focus areas during the reporting period, measures taken to monitor organisational ethics and planned areas of future focus are contained in the *Social and ethics committee: chairman's report*.

Responsible corporate citizenship

The mining industry introduces a unique responsibility and opportunity to the group to be a responsible corporate citizen. Although the board sets the tone and direction for the manner in which corporate citizenship should be approached and managed, ongoing oversight and monitoring of the group's performance against set targets again forms part of the mandate of the social and ethics committee. Extensive detail and information on the consequences of the group's activities and outputs that affect its status as a responsible corporate citizen with relevant measures and targets are given elsewhere in the integrated annual report relating to the following areas:

- **Workplace** – *Employee engagement* and *Socio-economic development; Remuneration report; Safety and health*
- **Economy** – *Employee engagement* and *Socio-economic development*
- **Society** – *Employee engagement* and *Socio-economic development*, which includes reports on corporate social investment and human rights

- **Environment** – *Environmental management and stewardship*

Good performance and value creation

Strategy

The board is responsible for approving the group's short-, medium- and long-term strategy as formulated and developed by management. In doing so, the board focuses on numerous critical aspects of the strategy including, among others, the legitimate and reasonable needs, interests and expectations of material stakeholders as well as the impact of the group's activities and output on the various forms of capital employed as part of the business process. The risks and opportunities connected to the triple context (economy, society and the environment) within which the group operates are integral to the board's strategic reviews of the business.

Policies and operational plans that support the approved strategy are submitted regularly by management for review and formal board approval. The board attends an annual “bosberaad” specifically dedicated to confirm and review the company's strategy. Strategy also forms part of the ongoing conversation in the boardroom and is a key agenda item at every board meeting. Ongoing oversight of the implementation of strategy and operational plans takes place against agreed performance measures and targets.

As the company's reputation as a responsible corporate citizen is an invaluable attribute and asset, the consequences of activities and our outputs, in terms of the various capitals employed, are continuously assessed by the board through its subsidiary committees. This will ensure that we are able to respond responsibly and limit any negative consequences of our activities, to the extent reasonably possible. In addition, the board continuously monitors the reliance of the group on these capital inputs – employees, financial capital, the environment, our reserves and resources, communities and society at large, our mining infrastructure and our intellectual and technological know-how – as well as the solvency and liquidity and going concern status of Harmony.

Reporting

In protecting and enhancing the legitimacy and reputation of the group, the board ensures that comprehensive reporting is done on different platforms. In addition to the integrated annual report (which

is available at www.harmony.co.za), a separate *Report to shareholders* as well as a *Financial report* and a *Mineral resources and mineral reserves report* are published. The group's sustainable development performance, as measured against the GRI Scorecard, also forms part of the group's publications. It is the board's intention to not only meet minimum legal requirements but also the legitimate and reasonable information needs of material stakeholders. The board is comfortable with management's bases for determining materiality for the purposes of deciding what information should be included in our external reports. The audit and risk committee, with the assistance of the social and ethics committee, has also been tasked with reviewing all external reports to verify the integrity of the information contained therein.

Political donations

Relevant GRI indicator: G4-SO6

Harmony supports the democratic processes in South Africa and Papua New Guinea, and contributes to their political parties. A policy relating to political donations has been adopted by the company. Harmony made no political party donations in the year under review.

Effective control: board structures and processes

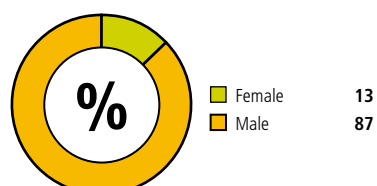
Role of the board

The board exercises its leadership role by:

- steering the group and setting its strategic direction
- approving policy and planning that gives effect to the direction provided
- overseeing and monitoring implementation and execution by management
- ensuring accountability for the group's performance by means of, among others, reporting and disclosures

Board characteristics:

By gender



- The role and function of the board, including guidelines relating to the board's composition and procedures, are documented in detail in the board charter, which is reviewed regularly to ensure that it remains relevant and applicable. A protocol is in place to be followed in the event of any of the board members or committees needing to obtain independent, external professional advice at the cost of the company on matters within the scope of their duties. Non-executive directors are also aware of the protocol to be followed for requisitioning documentation from, and setting up meetings with, management. Notwithstanding, board members have direct and unfettered access to the chief audit executive, the company secretary and members of executive management.

Based on its annual work plan, the board is satisfied that it fulfilled its responsibilities during the period under review in accordance with its charter.

Information on the number of board meetings held by the board and attendance can be found on page 109.

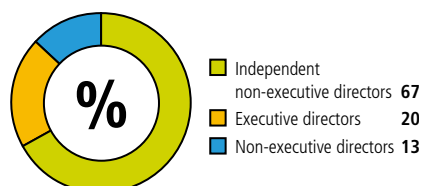
Board composition, chairman and independence

The Harmony board has 15 highly experienced and reputable members, three of whom are executive directors. The board increased its wealth of experience by appointing Mr Max Vuyisile Sisulu as an independent non-executive director effective 31 January 2018.

In an effort to ensure that the board and its committees remain refreshed, the board appointed Mr Mavuso Msimang as the new lead independent director, effective 10 May 2018. Additionally, the board changed the composition of its committees as follows:

- Ms Fikile De Buck was appointed as the new chairman of the audit and risk committee, replacing Mr John Wetton who remains a member of this committee.

By director



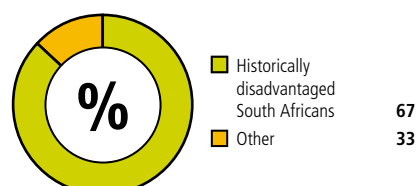
- Mr Modise Motloba was appointed as the new chairman of the investment committee, replacing Dr Simo Lushaba who remains a member of this committee.
- Mr Mavuso Msimang was appointed as the new chairman of the nomination committee, replacing Ms Fikile De Buck who remains a member of this committee.
- Dr Simo Lushaba was appointed as the new chairman of the social and ethics committee, replacing Mr Modise Motloba who remains a member of this committee.
- Mr Max Sisulu was appointed as a new member of the social and ethics committee.

The chairman of the board, Mr Patrice Motsepe, is a non-executive director but is not classified as independent. The board is satisfied that the new lead independent director, Mr Mavuso Msimang, meets the requirements for an independent director under the Companies Act, Act 71 of 2008 (the Companies Act) and King IV, and any other criteria evidencing objectivity and independence established by the board. The duties of the chairman as well as the lead independent director have been captured in the board charter and are based on the recommendations of King IV. The roles of the chief executive officer and chairman are separate.

In addition to the chairman and lead independent director, the board also has a deputy chairman, Mr Modise Motloba. These appointments are all reviewed annually and form part of the board's succession plan for the position of chairman.

Guidance provided by King IV, as far as the board chairman's membership of board committees is concerned, has been applied and the board chairman is only a member of the nomination committee.

By historically disadvantaged South Africans



CORPORATE GOVERNANCE CONTINUED

The nomination committee is chaired by the lead independent director.

Profiles of all board members can be found in the *Board of directors* in this report.

The majority of the non-executive directors are classified as independent and the independence of these board members has been reviewed by the nomination committee. The board appreciates that independence is first and foremost a state of mind and all board members, notwithstanding their categorisation, are expected to act independently and with unfettered discretion at all times. This expectation is also confirmed in the board charter.

A number of the independent non-executive directors have served in this capacity for periods longer than nine years. They are:

- Ms Fikile De Buck – 12 years
- Mr Joaquim Chissano – 13 years
- Mr Modise Motloba – 14 years
- Dr Simo Lushaba – 16 years

The nomination committee specifically assessed the independence of these individuals on behalf of the board and has concluded that the members exercise objective judgement at all times. In addition, there are no interests, positions, associations or relationships which, when judged from the perspective of a reasonable and informed third party, are likely to influence the members unduly or cause bias in their decision-making. The wealth of experience of these members, in addition to their being known as reputable individuals of integrity and great character, makes their ongoing input and contribution an invaluable asset to the board and the group.

Diversity is a key focus area for the board. Two board members are female and 10 members are black. A policy on gender and race diversity at board level has been formally adopted. Although no voluntary targets have been set, the appointment of two additional black female directors is under review. Considering all aspects relating to the composition of the board, the board is satisfied that its composition reflects the appropriate mix of knowledge, skills, experience and independence. In addition, the composition of the board and its leadership structure ensures that there is a balance of power in the boardroom

and that no one individual has unfettered authority of decision-making.

As required by the provisions of the Harmony Memorandum of Incorporation, a third of the non-executive directors are expected to retire by rotation at each annual general meeting of the company. The names and profiles of these members have been included in the notice of the 2018 annual general meeting in the *Report to shareholders 2018*. The board is comfortable in recommending their re-appointment to shareholders.

Nomination, election and appointment

The nomination committee is also tasked with identifying potential candidates for appointment to the board while the actual appointment is a matter for the board as a whole. The collective knowledge, skills and experience required by the board as well as diversity performance are all aspects considered by the board before appropriate candidates are identified for nomination. The nomination committee conducts the necessary independence checks and investigations, as recommended by King IV, in respect of potential candidates.

Formal letters of appointment are provided to all new board members. In addition, new board members participate in an extensive induction programme to enable them to make the maximum contribution within the shortest possible time. Ongoing mentorship is provided to members with no or limited governance experience and they are encouraged to undergo appropriate training. Provision has also been made in the board's annual work plan for regular briefings on legal and corporate governance developments, as well as risks and changes in the external environment of the group.

Conflicts of interest

Each member of the board is required, among others, to submit a general declaration of financial, economic and other relevant interests and to update these general declarations as and when necessary as a result of significant changes. In addition, the declaration of interests in any matter on the agenda of a meeting of the board or a board committee is a standard item at the start of every meeting. In the event of a potential conflict being declared, the board proactively manages such conflict within the boundaries of the law.

Board committees

The board has delegated particular roles and responsibilities to standing committees based on relevant legal requirements as well as on what is appropriate for the group and to achieve the objectives of delegation. The board recognises that duties and responsibilities can be delegated but that accountability cannot be abdicated. The board therefore remains ultimately accountable.

The following committees have been established:

- Audit and risk committee
- Remuneration committee
- Nomination committee
- Social and ethics committee
- Technical committee
- Investment committee

Disclosures in respect of each committee can be found from page 104 of this report.

Formal terms of reference have been adopted for each board committee and are reviewed annually (and when necessary) to ensure that the content remains appropriate and relevant. The terms of reference address, as a minimum, the recommended items in King IV.

In considering the membership of board committees, the board, with the assistance of the nomination committee, is mindful of the need for effective collaboration through cross-membership between committees, where required. The timing of committee meetings is co-ordinated so as to facilitate and enhance the effective functioning of and contribution made by each of the committees. The duties and responsibilities of each committee have been documented so as to clearly define the specific role and positioning of each committee in relation to topics that may be within the mandate of more than one committee. Committee membership has also been addressed to ensure a balanced distribution of power across committees so that no person has the ability to dominate decision-making and no undue reliance is placed on any one person.

The board is comfortable that each committee as a whole has the necessary knowledge, skills, experience and capacity to execute its duties effectively and with reasonable care and diligence. Each committee has, as a minimum, three

members. Members of the executive and senior management are invited to attend committee meetings as deemed appropriate and necessary for the effective functioning of the committee.

Any board member who is not a member of a specific committee is entitled to attend meetings of a board committee as an observer but is not entitled to participate without the consent of the committee chairman. Such members have no vote in meetings and will not be entitled to fees for attendance, unless specifically agreed by the board and provided for in the board fee structure as approved by shareholders.

The board considers the recommendations as provided by board committees in matters requiring board approval but remains responsible for applying its collective mind to the information, opinions, recommendations, reports and statements presented by the committees.

Board performance evaluations

The board fully supports the notion that an appropriate evaluation of the board and its various structures is a value adding exercise that facilitates the continued improvement of the board's performance and effectiveness. For this reason a formal self-evaluation process was again undertaken during the past year and included an assessment of the performance of the board, its chairman and individual members as well as the board committees, chief executive officer and company secretary.

Overall, the self-evaluation reconfirmed that the board and board committees were considered to be:

- highly effective
- appropriately positioned to discharge their governance responsibilities and that the board is well supported by its committees
- working as a cohesive unit and that the highest ethical standards are applied in deliberations and decision-making, thus enabling the board to provide effective leadership based on an ethical foundation

Considering the outcome of the evaluation process, the board is satisfied that the process is improving its performance and effectiveness.

The following matters were highlighted as further areas for improvement:

- The board has initiated a search process for the appointment of two additional black women to the board. The need for women with the necessary skills to serve on the audit and risk committee and the investment committee has also been identified
- Younger board members will be included in search criteria when new board members are identified
- The board has initiated a search process for the appointment of an additional board member with the necessary technical skills to serve on the technical committee
- Board papers are to be circulated at least seven days prior to board meetings
- Board meeting dates to be confirmed well in advance of the new calendar year
- Cyber security has been included as a topic for board training and information sessions

Appointment and delegation to management

The board is responsible for appointing the chief executive officer on the recommendation of the nomination committee. Harmony's chief executive officer is responsible for leading implementation and execution of the board-approved strategy, policy and operational planning, and serves as a link between the board and management.

He is accountable and reports to the board. The chief executive officer is not a member of the remuneration, audit or nomination committees.

He does however attend meetings of these committees as and when required for him to contribute insights and information.

The board monitors the chief executive officer's performance. Succession planning for this position forms part of the executive succession plan that is monitored on behalf of the board by the nomination committee. An emergency succession plan is also in place.

A formal delegation of authority framework is in place and is reviewed regularly by the board to ensure its appropriateness and relevance to the business. The delegation of authority addresses the authority to

appoint executives who may serve as ex officio executive members of the board and to make other executive appointments.

The board has identified key management functions and ensures that these functions are headed by individuals with the necessary competence and authority, and are adequately resourced. Executive succession planning includes plans for executive management succession and other key positions in order to provide continuity of leadership. These plans are reviewed periodically by the nomination committee on behalf of the board.

Company secretary

The board has direct access to the company secretary who provides professional and independent guidance to the board as a whole and to members individually on corporate governance and legal duties. The company secretary also supports the board in co-ordinating the effective and efficient functioning of the board and its committees.

The company secretary is a full time employee of Harmony and also oversees the legal function in the group. She is a qualified attorney, conveyancer and notary and has been a company secretary for the past 14 years (11 years in a listed environment). Her summary resumé is included in this report on page 112. In order to facilitate and enhance the independence and effectiveness of the company secretary, the board ensures that the office of the company secretary is empowered and that the position carries the necessary authority. The remuneration committee considers and approves the remuneration of the company secretary on behalf of the board.

The company secretary has unfettered access to the board and, at all times, retains an arms-length relationship with the board in order to enhance the independence of the position. The company secretary is not a member of the board but, being accountable to the board, reports to the board via the chairman on all statutory duties and functions performed in connection with the board.

The board annually assesses the performance and independence of the company secretary and also confirms that the company secretary has the necessary competence, gravitas and objectivity to provide independent guidance and support

CORPORATE GOVERNANCE CONTINUED

at the highest level of decision-making in the group. The company secretary's performance and independence were assessed at the end of the year under review, and the board is satisfied with her competence, experience and qualifications.

The board is therefore comfortable that the arrangements in place for accessing professional corporate governance services are effective.

Effective control – governance functional areas

Risk governance

The board appreciates that risk is integral to the way it makes decisions and executes its duties. Risk governance in the boardroom encompasses both risks and opportunities as well as a consideration of the potential positive and negative effects of any risks on the achievement of the group's objectives.

The group's risk appetite and tolerance levels, which support its strategic objectives, are considered annually. The board is supported in this area by the audit and risk committee.

Responsibility for implementing and executing effective risk management is delegated by the board to management. The board acknowledges the need to integrate and embed risk management in the business activities and culture of the group. The audit and risk committee is tasked with ensuring independent assurance on the effectiveness of risk management in the group, and when deemed necessary and appropriate.

Internal audit conducted a gap analysis on corporate governance in the company. The outcome revealed that the company was materially compliant. A full enterprise risk management assessment will be conducted during the course of the coming year.

The results of the ongoing oversight of risk management as well as detail on the nature and extent of the risks and opportunities that the group is willing to take are disclosed in *Managing our risks and opportunities*. An overview of the arrangements for governing and managing risk, key areas of focus during the reporting period, actions taken to monitor the effectiveness of risk management and planned areas of future focus are also included.

Technology and information governance

The board accepts responsibility for governing technology and information in a way that supports the group in setting and achieving its strategic objectives. The board is supported in this area by the audit and risk committee.

An information technology (IT) steering committee, chaired by the financial director and with its membership covering the head of information technology and members of the group executive committee, has a well-defined charter and is responsible for the oversight of information and technology direction, investment and alignment with business strategy and priorities.

Management adopted the Control Objectives for Information and Related Technologies (COBIT), a framework published by Information Systems Audit and Control Association (ISACA) for IT management and IT governance. COBIT provides a set of recommended best practices for governance and control processes of information systems and technology with the goal of aligning IT with business. COBIT is positioned at a high level and has been aligned and harmonised with other, more detailed IT standards and good practices.

Internal audit provides assurance to management and the audit and risk committee on the effectiveness of the governance of information and technology.

Compliance governance

Relevant GRI indicators: G4-SO7 and G4-SO8

The foundation of our corporate governance is compliance with the Companies Act, the requirements of the JSE, where we have our primary listing, and of the New York Stock Exchange as well as with the King IV Report and related principles and codes of good corporate governance. Harmony also complies voluntarily with the principles of the United Nations Global Compact, International Council on Mining and Metals, the GRI and the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (Cyanide Code).

Being an ethical and responsible corporate citizen requires zero tolerance of any incidences of legislative non-compliance.

In addition, compliance with adopted, non-binding rules, codes and standards is essential in supporting the achievement of strategic business objectives.

Corporate governance policy

Acknowledging the significance of compliance, the board, through the audit and risk committee, adopted a formal corporate governance and compliance policy which sets out the principles of good corporate governance for all employees at all operational levels as well as the board.

Code of conduct

Developed to respond to the challenge of ethical conduct in the business environment, our code of conduct commits Harmony, our employees and our contractors to the highest moral standards, free from conflicts of interest. The board reviews the code of conduct at least every second year, while its application within Harmony is continually monitored by management. The code of conduct was reviewed and updated during FY18. Our ethics programme is also subject to independent assurance as part of the internal audit coverage plan.

The code of conduct addresses critical issues including anti-corruption, gifts and entertainment and declarations of interests. It 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 an independent consulting firm), 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 conduct is protected. Our anonymous ethics hotline numbers, which are widely advertised throughout the organisation, are:

- South Africa: +27 (0) 800 204 256
- Papua New Guinea: +61 448 188 463
- Australia: +61 1800 940 949

Whistleblowing policy

Our whistleblowing policy encourages shareholders, employees, service providers, contractors and members of the public to report practices at any of our workplaces that are in conflict with any law, regulation, legal obligation, ethical codes

or governance policies. It also provides a mechanism for our stakeholders to report these practices internally, in confidence, independent of line management, and anonymously if they so wish.

Ethics officer and ethics management committee

An ethics officer has been appointed to ensure that the ethics management plan and programme is executed sufficiently and is duly communicated throughout the organisation. Our management ethics committee monitors our ethical culture and integrity with the assistance of the ethics officer. With the assistance of our ethics officer, the following were introduced and developed further during the year:

- An electronic gift register to monitor the receipt of gifts by our employees
- Streamlining the process of employees making personal declarations of interests in terms of the code of conduct
- Introducing a vendor ethics screening process to ensure that we do business with vendors that supports Harmony's values
- Implementing a fraud risk register to identify risk areas and any shortcomings in procedures and processes during formal investigations into misconduct
- Formalising the investigation methodology to ensure effective and transparent investigation processes

The management ethics committee 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.

Protection of Personal Information Act

Harmony has made significant progress in the implementation of the requirements of the Protection of Personal Information Act (PoPI). Harmony's PoPI awareness campaign has proven to be very successful.

In accordance with PoPI, the information and compliance officer manages the company's information, ensures compliance with PoPI, manages the company's records and archives and ensures compliance with the company's regulatory environment in general. The information and compliance officer compiles information and reports on the status of legislative compliance at the audit and risk committee meetings.

Promotion of Access to Information Act

Harmony complies with the Promotion of Access to Information Act, 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 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. The company received two requests for access to information in terms of this legislation during FY18.

Broad-Based Black Economic Empowerment Act

The annual compliance report in line with section 13G(2) of this Act is close to finalisation and will be available on the company's website at www.harmony.co.za.

Dealing in Harmony shares

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 the company secretary to deal in Harmony shares is regulated by the company's policy on trading in shares and insider trading. The policy was reviewed during FY18.

Significant fines

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 FY18.

Foreign private issuers

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 these differences can be found in our 2018 Form 20-F filed with the United States Securities and Exchange Commission on our website at: <https://www.harmony.co.za/invest/annual-reports>.

Remuneration governance

Attracting and retaining the required skills depends to a large extent on the remuneration levels and practices in any business. It is therefore vital to ensure that the group remunerates fairly, responsibly and transparently so as to promote the achievement of strategic objectives and positive outcomes in the short, medium and long term. The board is supported in this area by the remuneration committee.

Extensive detail on group remuneration is provided in the [Remuneration report](#). In addition, provision has been made in the notice of the 2018 annual general meeting for a non-binding advisory vote of shareholders on both the remuneration policy as well as on the remuneration implementation report.

Assurance and internal audit

The audit and risk committee oversees the arrangements for assurance services and functions on behalf of the board to ensure that those arrangements are effective in achieving the objectives of an enabling control environment and supporting the integrity of information, for internal decision-making and external reporting purposes.

A combined assurance model is applied that effectively covers the group's significant risks and material matters through a combination of internal functions and external service providers. Additional detail on the combined assurance model is provided in the [Assurance report](#).

Notwithstanding the output of the combined assurance model, board members are expected to apply an enquiring mind, form their own opinion on the integrity of the information and reports, and the degree to which an effective control environment has been achieved.

Internal audit plays an important part in the overall assurance approach and effectiveness of the assurance model. The audit and risk committee oversees the internal audit function on behalf of the board. More information on the internal audit function is contained in the [Audit and risk committee: chairman's report](#).

CORPORATE GOVERNANCE CONTINUED

Legitimacy

Stakeholder relationships

In the interests of Harmony's reputation and its legitimacy, the board sets the direction for the group's approach to stakeholder relationships. An inclusive stakeholder-engagement model has been adopted that considers the legitimate needs, interests and expectations of all material stakeholders.

Information on the material stakeholders and the manner in which relationships with stakeholders are managed is provided in *Stakeholder engagement and our material issues* which also addresses, among others,

the arrangements for governing and managing stakeholder relationships, key areas of focus during the reporting period, actions taken to monitor the effectiveness of stakeholder management and future focus areas.

Shareholders are encouraged to attend the Harmony annual general meeting, details of which are contained in the notice of the 2018 annual general meeting in the *Report to shareholders 2018*.

Board committees

During FY18, the board rotated the composition of its committees, effective 10 May 2018, to enhance committee

effectiveness and corporate governance.

The majority of the members of all board committees remained 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 interests of the company, based on his extensive knowledge of the specific areas of responsibilities of that committee.

A brief description of each board committee, its functions and what each committee achieved during FY18, follows.

Audit and risk committee

Members

Fikile De Buck*^ (chairman)

Dr Simo Lushaba*

John Wetton*

Karabo Nondumo*

Modise Motloba*

* Independent non-executive^

Appointed as chairman of the committee on 10 May 2018

Description of committee's overall expertise and experience

A total combination of the following skills and experiences on the part of the individual members of this committee enables them to execute their duties as members of the audit and risk committee:

- Experience in accounting, investment banking, treasury services and fund management
- Roles on various other boards and industry bodies
- Governance experience
- Knowledge of business development in and around Africa
- Given their previous roles as chief financial officers, business managers and an external auditor, members have 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

Audit and risk committee continued

Key activities and actions in FY18

For the actions of the audit and risk committee in FY18 refer to the Audit and risk committee chairman's report.

- 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 judgments, 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.
- Satisfied itself that the external audit firm, PricewaterhouseCoopers Inc, was suitable and 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
- Considered and approved the company's corporate governance and compliance policy
- Reviewed and recommended the committee's terms of reference to the board for approval.

Remuneration committee

Members

Vishnu Pillay* (chairman)	John Wetton*
Fikile De Buck*	André Wilkens
Dr Simo Lushaba*	

* Independent non-executive

Description of committee's overall expertise and experience

A total combination of the following skills and experiences on the part of the individual members of this committee enables them to execute their duties as members of the remuneration committee:

- Experience in accounting, remuneration and financial management roles, as well as mining experience, allowing members to ensure our remuneration is aligned with industry standards, best practice and legislation
- Knowledge of the duties and responsibilities of the board and executive positions, allowing realistic key performance indicators to be related to remuneration

Primary functions

- Ensures directors and executive management 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 the administration of its share incentive schemes
- Operates as an independent overseer of the group remuneration policy and makes recommendations to the board for final approval

CORPORATE GOVERNANCE CONTINUED

Remuneration committee continued

Key activities and actions in FY18

- Reviewed the benefits and remuneration principles as applied to Harmony executive management
- Received and discussed a summary of the total suite of Harmony executive management incentive schemes in order to obtain a holistic view
- Reviewed and recommended the committee's terms of reference to the board for approval, following which the committee's work plan was accordingly updated
- Considered and recommended the remuneration policy and implementation report to the board for inclusion in the notice of annual general meeting for consideration by the shareholders as non-binding advisory resolutions. (see [Remuneration report](#))
- Reviewed executive directors' and executive management's remuneration benchmarks and recommended their annual salary increases to the board for approval (see [Remuneration report](#))
- Reviewed the annual salary increases of the company secretary and chief audit executive
- Considered and recommended the company's total incentive plan to the board for approval as well as the deferred share plan inclusion in the notice to the annual general meeting for approval by the shareholders (see [Report to shareholders](#))

Nomination committee

Members

Mavuso Msimang*^ (chairman)	Modise Motloba*
Joaquim Chissano*	Fikile De Buck*
Dr Patrice Motsepe	

* Independent non-executive ^ Appointed as chairman of the committee on 10 May 2018, independent non-executive director

Description of committee's overall expertise and experience

The following insights allow the committee to find and nominate individuals who will add value to our Harmony board in the areas that we require:

- Experience in the mining, financial, accounting and legal sectors
- Extensive experience in management and leadership roles
- Understanding of Harmony, its needs and the requirements of being a board member

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 FY18

- Reviewed succession planning for directors and other members of the executive team and oversaw the board's self-assessment process
- Reviewed and recommended for re-election directors who retire by rotation in terms of the company's memorandum of incorporation
- Reviewed and made recommendations on the composition, structure and size of the board and board committees, in line with the board's policy on gender and race diversity
- Considered the positions of the chairman and the deputy chairman of the board and the 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 immediate and long-term succession plans for the board, the chairman of the board, the chief executive officer, executive management and the company secretary
- Considered the programme in place for the professional development and regular briefings on legal and corporate governance developments, risks and changes in the external environment of the organisation

Social and ethics committee

Members

Dr Simo Lushaba*^ (chairman)	Mavuso Msimang*
Joaquim Chissano*	John Wetton*
Fikile De Buck*	Modise Motloba*
Max Sisulu**	

* Independent non-executive ^ Appointed as chairman of the committee on 10 May 2018

** Appointed as member of the committee on 10 May 2018, independent non-executive director

Description of committee's overall expertise and experience

A total combination of the following skills and experiences on the part of the individual members of this committee enables them to execute their duties as members of the social and ethics committee:

- 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
- The collective 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 conduct within Harmony

Primary functions

- Oversees policy and strategies pertaining to occupational health and employee well-being, environmental management, corporate social responsibility, human resources, public safety and ethics management
- Monitors implementation of policies and strategies by executives and their management teams for each discipline referred to above
- Assesses Harmony's compliance 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 FY18

- Reviewed and recommended the social and ethics committee report to be included in the integrated annual report
- Reviewed and considered the social, economic, human capital 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 an environmental site visit at Moab Khotsoeng
- Reviewed and recommended changes to the committee's terms of reference to the board for approval. The committee's work plan was updated accordingly
- Considered and approved the third generation five-year social and labour plans
- Considered and approved the company's whistle blowing policy
- Reviewed and recommended the committee's terms of reference to the board for approval.
- See *Social and ethics committee: chairman's report*

CORPORATE GOVERNANCE CONTINUED

Investment committee

Members

Modise Motloba*^ (chairman)	John Wetton*
Ken Dicks*	André Wilkens
Karabo Nondumo*	Dr Simo Lushaba*
Vishnu Pillay*	

* Independent non-executive ^ Appointed as chairman of the committee on 10 May 2018

Description of committee's overall expertise and experience

The combination of the following 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:

- Occupy various roles on other boards
- Experience in entrepreneurship and business development
- Extensive knowledge of the mining, legal and financial industries

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 FY18

- Considered investments, proposals, projects and proposed acquisitions in line with the board's approved delegation of authority and the committee's terms of reference
- Reviewed and recommended the acquisition of Moab Khotsong to the board for approval
- Attended a site visit for a detailed update on the Wafi-Golpu project feasibility study
- Reviewed and recommended the budget and business plans for FY19
- Reviewed and recommended the committee's terms of reference to the board for approval, following which the committee's work plan was accordingly updated
- Attended a site visit at Moab Khotsong

Technical committee

Members

André Wilkens (chairman)	Vishnu Pillay*
Ken Dicks*	Karabo Nondumo*

* Independent non-executive

Description of committee's overall 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 fully grasp 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 FY18

- 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 company's annual budget and business plans for FY19
- Monitored safety across all operations
- Attended a site visit for a detailed update on the Wafi-Golpu project feasibility study
- Reviewed and recommended the committee's terms of reference to the board for approval.
- Attended a site visit at Moab Khotsong

Board and board committee meeting attendance – FY18

	Board	Audit and risk	Nomination	Remuneration	Technical	Investment	Social and ethics
Number of meetings held during the year	4	6	4	4	**8	**8	***7
Dr Patrice Motsepe (chairman)	4	–	4	–	–	–	–
Modise Motloba^ (deputy chairman)	4	6	2	–	–	^2	7
Joaquim Chissano	2	–	1	–	–	–	3
Fikile De Buck	4	5	4	4	–	–	6
Ken Dicks	4	–	–	–	8	8	–
Simo Lushaba	3	4	–	3	–	7	^0
Mavuso Msimang	4	–	2	–	–	–	3
Karabo Nondumo	4	5	–	–	8	8	–
Vishnu Pillay	3	–	–	4	6	6	–
John Wetton	4	6	–	4	–	8	7
André Wilkens	4	–	–	4	8	8	–
Max Sisulu*	1	–	–	–	–	–	^0
Peter Steenkamp	4	–	–	–	–	–	–
Frank Abbott	4	–	–	–	–	–	–
Mashego Mashego	4	–	–	–	–	–	–

– Not applicable

* Appointed to board on 31 January 2018

** Includes three site visits

*** Includes two site visits

^ Appointed to committee to 10 May 2018

BOARD OF DIRECTORS



Chairman

1 Dr Patrice Motsepe (56)

BA, LLB, Doctorate of Commerce (Honoriis Causa), Doctor of Management and Commerce (Honoriis Causa)

- Appointed a director and non-independent non-executive chairman on 23 September 2003
- Member of the nomination committee

Independent non-executive deputy chairman

2 Modise Motlobo (52)

BSc, Diploma in Strategic Management

- Appointed to the board on 30 July 2004
- Chairman of the investment committee and member of the nomination committee, audit and risk committee and the social and ethics committee

Lead independent non-executive director

3 Mavuso Msimang (76)

MBA (Project Management), BSc

- Appointed to the board on 26 March 2011
- Chairman of the nomination committee and member of the social and ethics committee.



EXECUTIVE DIRECTORS

Chief executive officer

4 Peter Steenkamp (58)

BEng (Mining), Mine Manager's Certificate Metal Mines, Mine Manager's Certificate Fierly Mines, CPIR, MDP, BLDP

- Appointed to the board on 1 January 2016, on appointment as chief executive officer

Financial director

5 Frank Abbott (63)

BCom, CA(SA), MBL

- First appointed to the board as non-executive director on 1 October 1994 and was financial director from 1997 until 2004
- Re-appointed financial director in February 2012

Executive director: stakeholder relations and corporate affairs

6 Mashego Mashego (54)

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

- Joined Harmony in 2005 and appointed an executive director on 24 February 2010



INDEPENDENT NON-EXECUTIVE DIRECTORS

7 Fikile De Buck (58)

BA (Economics), FCCA

- Appointed to the board on 30 March 2006
- Chairman of the audit and risk committee and member of the social and ethics committee, the remuneration committee and the nomination committee

8 Joaquim Chissano (79)

PhD

- Appointed to the board on 20 April 2005
- Member of the nomination committee and the social and ethics committee

9 Ken Dicks (79)

Mine Manager's Certificates (Metalliferous Mines and Fiery Coal Mines), Management diplomas

- Appointed to the board on 13 February 2008
- Member of the technical committee and the investment committee

10 Dr Simo Lushaba (52)

BSc (Hons), MBA, DBA, CD (SA)

- Appointed to the board on 18 October 2002
- Chairman of the social and ethics committee, member of the audit and risk committee and the remuneration committee and the investment committee



11 Karabo Nondumo (40)

BAcc, HDip (Acc), CA(SA)

- Appointed to the board on 3 May 2013
- Member of the audit and risk committee, the technical committee and the investment committee

12 Vishnu Pillay (61)

BSc (Hon), MSc

- Appointed to the board on 8 May 2013
- Chairman of the remuneration committee and member of the technical committee and the investment committee

13 John Wetton (69)

CA(SA), FCA

- Appointed to the board on 1 July 2011
- Member of the audit and risk committee, social and ethics committee, remuneration committee and investment committee

NON-EXECUTIVE DIRECTOR

André Wilkens (69)

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

- Appointed to the board on 7 August 2007
- Chairman of the technical committee and member of the investment committee and the remuneration committee

14 Max Sisulu (73)

MA (Political science), MA (Political economy)

- Appointed to the board on 31 January 2018
- Member of the social and ethics committee

Full and detailed resumés of all members of Harmony's board of directors are available at <https://www.harmony.co.za/who-we-are/board>

EXECUTIVE MANAGEMENT



GROUP CHIEF EXECUTIVE OFFICER'S OFFICE

Chief executive officer

- 1 Peter Steenkamp (58)**
BEng (Mining), Mine Manager's Certificate Metal Mines, Mine Manager's Certificate Fiery Mines, CPIR, MDP, BLDP

Financial director

- 2 Frank Abbott (63)**
BCom, CA(SA), MBL

Executive director: stakeholder relations and corporate affairs

- 3 Mashego Mashego (54)**
BA (Education), BA (Hons) (Human Resources Management), Joint Management Development Programme, Global Executive Development Programme

Chief operating officer: new business development, corporate strategy and projects

- 4 Phillip Tobias (48)**
BSc (Mining Engineering), International Executive Development Programme, Advanced Management Programme, Pr Eng and Mine Manager's Certificate of Competence

Chief operating officer: South Africa

- 5 Beyers Nel (41)**
BEng (Mining Engineering), MBA, Pr. Eng, Mine Manager's Certificate of Competency

Chief executive officer: South-East Asia

- 6 Johannes van Heerden (46)**
BCompt (Hons), CA(SA)

EXECUTIVES REPORTING TO THE CHIEF EXECUTIVE OFFICER/FINANCIAL DIRECTOR



Investor relations

- 7 Marian van der Walt (45)**
Studying towards an Executive MBA at Oxford University's Said Business School (to be completed May 2019); IR Certificate (UK IR Society); BCom (Law), LLB, Higher Diploma in Tax, Diplomas in Corporate Governance and Insolvency Law, Certificates in Business Leadership

Special projects

- 8 Abré van Vuuren (58)**
BCom, Development Programme in Labour Relations, Management Development Programme, Advanced Labour Law Programme, Board Leadership Programme

Chief financial officer

- 9 Boipelo Lekubo (35)**
BCom (Hons), CA(SA)

Chief financial officer: Treasury

- 10 Herman Perry (46)**
BCom (Hons), CA(SA)

Sustainable development

- 11 Melanie Naidoo-Vermaak (44)**
BSc (Hons) (Industrial Microbiology), MSc (Sustainable Development), MBA

Company secretary and legal

- 12 Riana Bisschoff (41)**
LLB, LLM

Chief audit executive

- 13 Besky Maluleka Ngunjiri (42)**
BCompt (Hons), CTA, CIA, CCSA



EXECUTIVES REPORTING TO THE CHIEF OPERATING OFFICER: SOUTH AFRICA

Ore reserve management

- 1 Jaco Boshoff (49)**
BSc (Hons), MSc, MBA, Pr Sci
Nat, MSAIMM, MGSSA

Human resources

- 2 Anton Buthelezi (54)**
National diploma (Human
Resources Management),
BTech (Labour Relations
Management), Advanced
Dip. in Labour Law, Cert. in
Business Leadership

Safety and technology

- 3 Tom van den Berg (50)**
MBL, BTech Mining
Engineering

Health

- 4 Dr Tumi Legobye (46)**
MBChB, Diploma in
Occupational Health, Project
Management

Technical services and engineering

- 5 Robert Hart (44)**
BEng (Mech), MBA

Chief financial officer (South Africa operations)

- 6 Danie Muller (58)**
BCom

REGIONAL GENERAL MANAGERS



Moab Khotsoeng and Tshepong Operations

- 8 Moses Motlhageng (42)**
B-Tech (Mining), Mine
Manager's Certificate of
Competency, Professional
Engineering Technician
w(Pr. Techni Eng)

Doornkop, Kusasalethu and Kalgold

- 9 Floyd Masemola (38)**
B.Eng (Mining), Mine
Manager's Certificate of
Competency, Mine Overseer's
Certificate of Competency,
Post-Graduate Diploma in
Management Practice

Bambanani, Unisel, Joel, Masimong and Target

- 10 Francois Janse van Rensburg (43)**
B. Eng (Mining), MBA, Pr. Cert. Eng.,
Mine Manager's Certificate, Mine
Overseer's Certificate, Leadership
Development Programme

Full and detailed
resumes of all
members of
Harmony's executive
management are
available at [https://
www.harmony.
co.za/who-we-
are/executive-
management](https://www.harmony.co.za/who-we-are/executive-management)

EXECUTIVE MANAGEMENT CONTINUED



EXECUTIVES REPORTING TO THE CHIEF EXECUTIVE OFFICER: SOUTH-EAST ASIA

Operations

1 Charles de Villiers (48)

B. Eng (Mining), M. Eng
(Mineral Economics)

Chief financial officer

2 Aubrey Testa (42)

Accounting (Cum Laude),
B Compt

Projects and Wafi-Golpu joint venture

3 Bryan Bailie (55)

National Higher Diploma
– Mechanical Engineering,
Higher Diploma Project
Management, PMI Professional
Project Manager, South Africa
Government Certificate of
Competency – Mines and Works,
Executive and Management
Development Diplomas



New business and resource development

4 Greg Job (54)

BSc (Geology), MSc (Mineral
Economics), Member AusIMM

Exploration

5 Mike Humphries (51)

BSc(Hons)

Engineering and asset management

6 Stan Bierschenk (52)

Elect Eng HC, MBA,
GCC (Electrical engineering)

Corporate affairs

7 Richard Wills (63)

BA, LLB, B Compt, LLM

Full and detailed resumés of all members of Harmony's executive management are available at <https://www.harmony.co.za/who-we-are/executive-management>

AUDIT AND RISK COMMITTEE: CHAIRMAN'S REPORT



"The committee's diverse perspectives, independence, knowledge and experience increases the value of Harmony's governance structures"

Fikile De Buck: Chairman audit and risk committee

Harmony's audit and risk committee (the committee) is pleased to present its report for the financial year ended 30 June 2018 (FY 18). This report addresses various material issues beyond compliance with the statutory requirements relating to an audit committee.

Introduction

The committee is an independent statutory committee appointed by Harmony's shareholders. In compliance with section 94 of the Companies Act of 2008 (the Act) and the principles of good governance, shareholders annually appoint certain independent directors as members of the audit committee to fulfil the statutory duties as prescribed by the Act.

In addition, Harmony's board of directors (the board) delegates specific oversight functions to the committee.

This report considers these statutory and delegated duties as well as the committee's responsibilities in terms of the JSE Listings Requirements. It also addresses some of the matters that the King IV Code on Corporate Governance, 2016 (King IV) advises should be considered by an audit committee.

Terms of reference

The committee has formal terms of reference, which are reviewed and updated annually as necessary (or more frequently if required) by both the committee and the board. The committee is satisfied that it has conducted its affairs in accordance with its terms of reference and has discharged its responsibilities.

The committee's terms of reference can be accessed at our corporate website, www.harmony.co.za.

Composition and function

During the course of the year, the nomination committee considered the composition and roles of the board committees. This process ensures independence and that these committees remain refreshed. As a result of this process, it was agreed that John Wetton be replaced by Ms Fikile De Buck as chairman of the committee. Mr Wetton remains a committee member and also serves as the deputy chairman of the committee. The committee thanks Mr Wetton for his invaluable commitment and service throughout his tenure as chairman of the committee.

The committee's diverse perspectives, independence, knowledge and experience increase the value of Harmony's governance structures. For details of the qualifications, expertise and experience of the members of the audit and risk committee, refer to *Board of directors*.

Recommendations for the appointment of members to the committee for the new financial year can be found in the notice of annual general meeting in the *Report to shareholders 2018* that accompanies the annual financial statements.

The group chief executive, the financial director, the executive: risk management and services improvement, the executive: ore reserves, the group IT manager, the external auditors, the chief audit executive and other assurance providers attend meetings either by standing invitation or as and when required.

As at the date of this report, the committee comprised the following independent members:

Name	Status	Date appointed
Fikile De Buck (chairman)	Independent non-executive director	30 March 2006 (Chairman with effect from 10 May 2018)
John Wetton	Independent non-executive director	1 July 2011
Dr Simo Lushaba	Independent non-executive director	18 October 2002
Modise Motloba	Independent non-executive director	30 July 2004
Karabo Nondumo	Independent non-executive director	3 May 2013

AUDIT AND RISK COMMITTEE: CHAIRMAN'S REPORT

CONTINUED

Roles and responsibilities

The committee is satisfied that it complied with its legal, regulatory and other responsibilities during the past financial year. The committee's primary objective is to assist the board with its responsibilities of ensuring the integrity of financial statements, the management of risk and cyber security, as well as the safeguarding of assets. Additionally, the committee is mandated to provide oversight of financial control and reporting on internal controls, shareholder reporting and corporate governance, particularly relating to legislative and regulatory compliance.

The committee's roles and responsibilities include statutory and regulatory duties as per the Act, the JSE Listings Requirements and those items recommended in the interest of good governance according to King IV. In addition, the board has assigned other ad hoc duties to the committee, embodied in its terms of reference.

The board conducts annual reviews of the committee's duties and terms of reference as well as annual assessments of its performance, in a manner determined by the board.

No major concerns were raised by any member of the committee in FY18.

For more on the committee and its activities during the year under review, see [Corporate governance](#).

The integrated annual report

The committee is responsible for overseeing the group's integrated annual report and the reporting process. This integrated annual report, which has been reviewed by the committee, focuses not only on the group's financial performance, but also its economic, social and environmental performance. This report sets out how the group has engaged with stakeholders, addressed its material issues and governed its business. The committee is satisfied with the quality and integrity of the information contained in the integrated annual report 2018 and recommended it to the board for approval.

Annual report filed on Form 20-F with the United States Securities and Exchange Commission

The committee has reviewed the annual report filed on Form 20-F for the year ended 30 June 2018 and recommended the report to the board for approval.

Annual financial statements and accounting practices

The committee reviewed the audited annual financial statements and summarised consolidated financial statements for the year ended 30 June 2018. The statements comply with International Financial Reporting Standards and no significant matters were identified by the committee in that regard. The committee submits that they present a balanced view of the group's performance for the period under review.

The committee considered the JSE's most recent report back on proactive monitoring of financial statements, and where necessary those of previous periods, and has taken appropriate action where necessary to respond to the findings as highlighted in the JSE report when preparing the annual financial statements.

The committee recommended the annual financial statements and summarised consolidated financial statements to the board for approval.

External auditor appointment and independence

The committee is satisfied that the external auditor, PricewaterhouseCoopers (PwC), is independent of the group, as set out in section 94(8) of the Act. This opinion is based on consideration of previous appointments of the auditor and the extent of other work the auditor has undertaken for the group. In a written statement addressed to the committee, PwC confirmed that their independence complies with criteria relating to independence or conflicts of interest as prescribed by the Independent Regulatory Board for Auditors, the Public Company Accounting Oversight Board, the American Institute of Certified Public Accountants and the Securities and Exchange Commission. Requisite assurance was sought and provided by the auditor that internal governance processes within the audit firm support and demonstrate its independence.

The committee ensured that the appointment of the auditor complies with the requirements of the Act and other applicable legislation relating to the appointment of auditors. The committee, in consultation with management, agreed to the engagement letter and terms, and to the audit plan as well as scope of work performed and budgeted audit fees for the 2018/19 year.

A formal procedure has been adopted to govern the process whereby the external auditor may be considered for non-audit services and the extent of these services is closely monitored by the committee.

Fees paid to the external auditor for the year were R35.8 million, of which R35.1 million was for audit related services, R0.2 million for non-audit services and R0.5 million for tax services.

Tenure of the audit firm

PwC has been the group's external auditor for 68 years. At the annual general meeting held on 23 November 2017, PwC was reappointed as the independent external auditor and undertook to hold office until the conclusion of the 2018 annual general meeting.

The committee considered the suitability of PwC and designated audit partner as required by paragraph 3.84(g) (iii) of the JSE Listings Requirements and found same to be adequate based on PwC's submission of the relevant information as required by paragraph 22.15 (h) of the JSE Listings Requirements.

The individual registered auditor responsible for the audit for the financial year ended 30 June 2018 was Mr HP Odendaal. As PwC is required to rotate the audit partner responsible for the group audit every five years, the current lead audit partner will be required to change from FY21 onwards.

As part of Harmony's commitment to transformation, PwC continued to partner with Ngubane & Co., a black audit firm, as part of the PwC engagement team. To facilitate the transfer of skills in the audit of mining companies and SEC registrants, Ngubane & Co. assisted PwC on the audit of Harmony's South African operations. PwC had overall responsibility for the audit and signed off the financial statements. Ngubane & Co. is a level 1 broad-based black economic empowerment company.

The committee has recommended to the board that PwC be re-appointed as the group's independent external auditor, to hold office until the conclusion of the 2019 annual general meeting.

The directors will propose the re-appointment of PwC at the annual general meeting to be held on 7 December 2018. Details can be found in the notice of the annual general meeting in the Report to shareholders 2018 that accompanies the annual financial statements.

Mandatory audit firm rotation is effective from financial years commencing on or after 1 April 2023 and is applicable to listed companies, as well as all public interest entities, to promote superior audit quality and audit independence. Harmony is supports the process, and further details will be provided to shareholders at the 2019 annual general meeting.

Internal controls

The committee considers significant control deficiencies raised by management and by the internal and external auditors, and reports its findings to the board. Where weaknesses are identified, the committee ensures that management takes appropriate action.

Based on a review of the design, implementation and effectiveness of the group's system of internal financial controls conducted by the internal audit function during the year under review, and on reports made by the independent external auditors on the results of their audit and management reports, the committee is satisfied that the company's system of internal financial controls is effective and forms a basis for the preparation of reliable financial statements. No findings have come to the attention of the committee to indicate that any material breakdown in internal controls occurred during the past financial year.

Internal audit

In accordance with the requirements of King IV, the committee confirms that, having considered the effectiveness of the chief audit executive, Ms Besky Ngunjiri, it is satisfied that she has the appropriate expertise and experience to meet the responsibilities of this position. The committee is also satisfied that the internal audit function is adequately resourced with technically competent individuals and operates both effectively and efficiently.

The committee is responsible for:

- ensuring that the group's internal audit function is independent and has the necessary resources, standing and authority within the group to enable it to perform its duties
- oversees co-operation between the internal and external auditors, and serves as a link between the board of directors and these functions

The chief audit executive is responsible for regularly reporting the findings of the internal audit work against the agreed internal audit plan to the committee.

She has direct access to the committee, primarily through its chairman.

During the year, the committee met with the external auditors and with the chief audit executive without management being present.

The committee is satisfied that the group internal audit follows an approved risk-based internal audit plan and regularly reviews the group's risk profile with necessary changes to the internal audit plan being proposed as and when deemed appropriate. Internal audit provides an overall statement as to the effectiveness of the group's governance, risk management and control processes.

Combined assurance

The committee is satisfied that the group has optimised the assurance coverage obtained from management, and internal and external assurance providers, in accordance with an appropriate approved combined assurance model. The committee is also satisfied that the combined assurance model and related systems and procedures are effective in achieving the following objectives:

- Enabling an effective internal control environment
- Supporting the integrity of information used for internal decision-making by management, the board and its committees
- Supporting the integrity of external reports
- Minimising assurance fatigue

Going concern

The audit committee has reviewed a documented assessment, including key assumptions prepared by management, of the going-concern status of the group. The board's statement on the going-concern status of the group, as supported by the audit committee, appears in the directors' responsibility for financial reporting section of the integrated annual report.

Governance of risk

The audit committee fulfils a dual function, being both an audit committee and a risk committee. Internal audit conducts regular and full assessments of the risk management function and framework. The committee is satisfied with the effectiveness of its oversight of the governance of risk in the group. A detailed report on risk, as recommended in King IV, is contained in this integrated annual report. See *Managing risks and opportunities*.

Information and technology governance

The board recognises that technology is now more than just an enabler, but that technology is both a source for future opportunities and platforms on which our organisation conducts its business.

The audit and risk committee has delegated responsibility to management for implementing the policy on enterprise-wide information and technology management, and for embedding it into the day-to-day, medium- and long-term decision-making activities and culture of the organisation.

During the period under review, *inter alia*, management reviewed and expanded governance of the information technology (IT) project management office, implemented an information security management system, integrated its IT systems at Moab Khotso and ensured the alignment of adequately skilled resources to support operational and project initiatives as per the approved strategy.

Events subsequent to June 2018

- On 12 July 2018, shareholders approved a special resolution to issue 11 032 623 new ordinary shares to African Rainbow Minerals Limited at the placing price of R19.12 (ARM Placing). The proceeds of R211 million (US\$16 million) raised from the ARM Placing were used to repay part of the outstanding bridge loan raised for the acquisition of Moab Khotso
- On 18 July 2018, the remaining outstanding balance of US\$50 million (R670 million) was repaid on the US\$200 million bridge loan
- On 4 October 2018, Harmony reached a mutually acceptable settlement with the Financial Sector Conduct Authority of South Africa. The dispute related to incorrect financial results reported for the March 2007 quarter. Harmony informed shareholders and the authorities of the error in August 2007. Subsequently Harmony reviewed all financial accounting procedures and systems to ensure that a similar error would not occur. Following various discussions with the authorities, an administrative penalty of R30 million was imposed and paid by Harmony

Fikile De Buck

Audit and risk committee: Chairman

25 October 2018

REMUNERATION REPORT



“To ensure peak performance and that our business objectives are responsibly met, it is imperative that employees and directors of the company are fairly rewarded.”

Vishnu Pillay Chairman remuneration committee

Dear shareholder

I am pleased to submit the Remuneration Report as part of Harmony's Integrated Annual Report 2018. To ensure peak performance and that our business objectives are responsibly met, it is imperative that employees and directors of the company are fairly and responsibly rewarded. The remuneration committee plays an important role in ensuring fair, equitable and responsible remuneration practices.

As evidenced by the Remuneration Policy (Part 1) and Implementation Report (Part 2), significant progress has been made in addressing company performance and the topical issues of a living wage, diversity and pay equality internally. Our aim is to ensure that a process is in place to keep these issues in the forefront and to address any inconsistencies that deviate from the norms of good governance.

Gold mining in South Africa

The South African gold industry is maturing and shrinking with annual gold production declining from 198 tonnes to 138 tonnes during the period 2009 to 2017¹. Against the multiple challenges of increasing mining depth, rising costs and a volatile rand/gold price, South African gold mines are under pressure to deliver a reasonable margin after all-in sustaining costs are considered. As a result, around 75% of gold mines operating in South Africa today are unprofitable². Despite these challenges Harmony remains committed to a “living wage” approach for its employees.

For a detailed account of the overall remuneration packages of Harmony's lower level employees (category 4 – 8), please refer to page 120 of this Remuneration report.

Financial and operational performance

Against this background, and in keeping with its mandate from the board, the executive team has, despite all odds, achieved a significant outcome for FY18. The team has delivered an improvement of 13% on its total lost-time injury frequency rate (LTIFR), increased its gold production by 13%, increased its underground recovered grade from 5.07g/t to 5.48g/t and improved the all-in sustaining cost for the year from R516 687/kg to R508 970/kg.

Further to our improved operating performance, and with the board's support, Harmony concluded the US\$300 million acquisition of the Moab Khotsoeng mine and related assets from AngloGold Ashanti Limited. This acquisition helped raise full year gold output, assisted in lowering group costs and boosted grades mined. It has significantly enhanced our operating flexibility and contributed positively to cash generation for the group.

Harmony's social responsibility

In 2017, I made reference to “living wages” for our entry level workers. The reduction of inequality remained a top priority with a focus placed on “living wages” for entry-level workers. Managing the wage gap included finding innovative ways in which the company may be able

Harmony's remuneration philosophy is aligned with the following Sustainable Development Goals:

1 NO POVERTY

5 GENDER EQUALITY

8 DECENT WORK AND ECONOMIC GROWTH

10 REDUCE INEQUALITIES

to assist workers in addressing their most pressing basic financial concerns. This calls for innovative thinking at all levels and by all role players.

In this remuneration report we expand on the concept of a “living wage” and how it is being addressed by Harmony in an effort to improve the lives of our employees through the provision of improved living conditions, better access to physical and social services, health care and education and training. See pages 120 and 129 of this Remuneration report.

¹ <http://www.goldwageningenegotiations.co.za/facts-figures>

² <http://www.thisisgold.co.za/component/jdownloads/send/2-fact-sheets/19-the-state-of-the-gold-industry>

2018 wage negotiations

The 2018 round of wage negotiations in the gold sector began on 11 July 2018, between the Minerals Council (representing four gold mining companies) and the four trade unions: Association of Mine Workers and Construction Union (AMCU), National Union of Mineworkers (NUM), United Association of South Africa (UASA) and Solidarity. We reached a three-year wage agreement on 3 October 2018, effective from 1 July 2018, with the NUM, UASA and Solidarity.

The increase in the standard rate of pay for the first year is R700 for category 4-8 employees and 6.3% for miners, artisans and officials. The living out allowance will increase annually by R100 from 1 September 2018. We are grateful to the unions, employees, the Minerals Council and the Commission for Conciliation, Mediation and Arbitration for the constructive manner and spirit in which the negotiations were concluded. Refer to www.goldwagene negotiations.co.za for more details.

Gender and race equality

Harmony's remuneration policy is to remunerate based on an individual's ability, skills and knowledge. Men and women, irrespective of their race, are paid equally for equivalent roles. There is no differentiation in remuneration based on gender, race or any other arbitrary reason. The gender distribution for all employment categories is more fully discussed in [Part 2](#) of this Remuneration report. The overall number of females represented in the organisation's workforce is low. Harmony is systematically addressing this discrepancy by employing a greater number of women at the underground operations. For more, refer to [Employee engagement](#).

Fair and responsible pay

Remunerating executives fairly and holding them accountable for the success of the business is in the interests of all stakeholders, including employees, the community at large and business partners and suppliers. The "living wage" approach for junior workers aims to underpin the concept of fair and responsible pay.

While average levels of executive pay remain high relative to lower level employees, and are viewed as excessive by labour and the general public, increases in

guaranteed executive pay have generally remained subdued and are below those granted to lower level employees as part of the company's continuing efforts to reduce the pay-gap.

In FY18, an average increase of 6% to guaranteed remuneration packages for non-unionised employees and 7.5% for unionised employees had been approved and agreed.

In order for the committee to more efficiently track the income dispersion between high and low income earners, a comprehensive exercise has been undertaken to determine the company's Gini co-efficient. Based on the analysis, it was concluded that Harmony has a more favourable level of income dispersion (0.33) when compared to the South African national all industries (0.43) as well as the South African mining industry (0.42). Both the national and mining industry Gini co-efficients were calculated on an on-target benchmarked total reward basis, whereas Harmony's Gini co-efficient was calculated on an actual total reward basis.

Changes to Harmony's short- and long-term incentive plans

As noted last year, the key focus area for the committee during FY18 was to continue and finalise the review of our short- and long-term incentive plans currently in place for management and executive employees. In consultation with our shareholders and employees, a number of challenges have been identified with the current plans. Our remuneration consultants provided the committee with an overview of current best practice trends in the market and we, as a result, have come a long way in designing a simplified, market-related total incentive plan comprising a long-term deferred share plan and a short-term annual cash payment (the Total Incentive Plan). This revised plan will be implemented from 1 July 2019, subject to shareholder approval of the new proposed deferred share plan at the upcoming annual general meeting. For more information, refer to the Notice of Meeting in the [Report to shareholders 2018](#) and [Part 1](#) of this [Remuneration report](#).

King IV principles

The remuneration committee continues to review local and global remuneration trends and our remuneration strategy.

At the 2017 annual general meeting, the non-binding, advisory vote on the remuneration policy was supported by more than 98% of the votes exercised on the resolution. Considering that 83% of the total issued shares of the company were voted on the resolution, the remuneration committee is satisfied with shareholders' support for this very important aspect of the business. However, this does not mean that we should be complacent and the remuneration committee is committed to continuous improvement in remuneration practices in the best interests of the company and its stakeholders. The committee is satisfied that the remuneration policy has achieved its stated objectives for the year.

For more on the committee and its activities during the year under review, see [Corporate governance](#) in this report.

No member of the committee has a personal interest in the outcome of decisions made during the period under review, and four of its five members are independent non-executive directors. The chairman of the board is not a member of the committee.

We value our shareholder comments and, as always, we invite our shareholders to engage with the company, through the office of the company secretary (companysecretariat@harmony.co.za).

I remain grateful to the Board, remuneration committee members and executive directors for their support and commitment during 2018.

Vishnu Pillay
Chairman, remuneration committee
25 October 2018

REMUNERATION REPORT CONTINUED

PART 1: FY19 REMUNERATION POLICY

Harmony's reward strategy underpins our business strategy of safely producing profitable ounces and increasing our margins.

In order to achieve this, we rely on experienced, skilled teams who live our values and maintain stakeholder relationships, in growing profits, and in maintaining a sustainable company.

Our remuneration policy has been designed with our business strategy in mind – to attract and retain these experienced, skilled teams, and to motivate them to deliver 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 aligned and market competitive.

In determining remuneration, the remuneration committee takes into account shareholders' interests as well as the financial health and future of the company.

GENDER AND RACE EQUALITY

Harmony's remuneration policy is to remunerate based on an individual's ability, skills and knowledge. Men and women, irrespective of their race, are equally paid for equivalent roles. There is no differentiation in remuneration based on gender, race or any other arbitrary ground.

FAIR AND RESPONSIBLE PAY

Harmony is committed to the concept of a "living wage" which is based on the philosophy of fair and responsible pay. It embodies our efforts to improve the lives of our employees by enabling them to improve their living conditions and to have better access to physical and social services, health care and education and training. For more information, refer to *Employee engagement* and *Socio-economic performance*.

REMUNERATION MIX AT HARMONY

Harmony chooses to adopt an integrated approach to rewarding its employees.

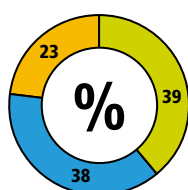
Management employees

The table below illustrates the desired outcome of the total remuneration package for management, based on achieving targeted performance. The guaranteed pay, short-term incentives and long-term incentives are expressed as a percentage of total remuneration.

The compositions of total remuneration outcomes for FY18 illustrated below:

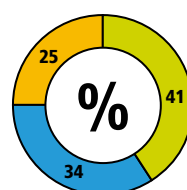
On target pay mix:

Chief executive officer

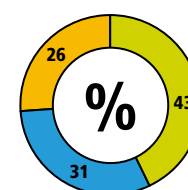


■ Guaranteed pay ■ Long-term incentive ■ Short-term incentive

Financial director, executive director and prescribed officers



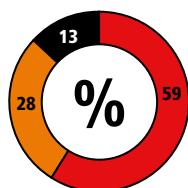
Executives



Category 4-8 employees

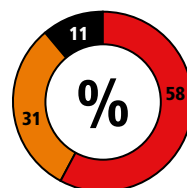
Average monthly wages and benefits

Category 4 underground employee (entry level)



■ Fixed earnings ■ Variable income ■ Company benefits

Category 8 underground employee



Each component includes the following:

Fixed earnings: Basic pay, service increment, 13th cheque, living out allowance

Variable income: Average overtime, shift allowance, average bonus, meal allowance, Unemployment Insurance Fund/skills development levy, insurance benefit

Company benefits: Employer provident/pension fund and medical aid

Key elements of Harmony's remuneration structure (management employees)

Reward elements	Remuneration strategy																										
Guaranteed pay	<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 remains 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>																										
Short-term incentive	<p>The short-term incentive scheme provides for bonus payments that are:</p> <ul style="list-style-type: none">• based on team performance against annual targets that are reviewed annually, modified by a personal performance rating for executive management• 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• paid monthly for mining and engineering crews <p>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.</p> <p>For executive management, the measures and weightings are as follows:</p> <table><tr><th>Performance drivers</th><th>Weighting</th></tr><tr><td>Gold produced</td><td>40%</td></tr><tr><td>Total cost (working cost + capital expenditure excluding royalties)</td><td>30%</td></tr><tr><td>Underground grade</td><td>30%</td></tr></table> <p>Payment parameters</p> <p>To achieve a minimum qualification for a bonus, Harmony must achieve at least 95% of the business plan.</p> <p>On-target performance will result in a total bonus of 60% of guaranteed pay.</p> <p>Above-target performance is capped at 100% of guaranteed pay as illustrated below:</p> <table><tr><th>% of business plan achieved</th><th>% of 6-month guaranteed pay</th><th>Parameter</th></tr><tr><td><95</td><td>0</td><td></td></tr><tr><td>95</td><td>40</td><td>Threshold</td></tr><tr><td>100</td><td>60</td><td>Target</td></tr><tr><td>105</td><td>100</td><td>Maximum</td></tr><tr><td>>105</td><td>100</td><td></td></tr></table>	Performance drivers	Weighting	Gold produced	40%	Total cost (working cost + capital expenditure excluding royalties)	30%	Underground grade	30%	% of business plan achieved	% of 6-month guaranteed pay	Parameter	<95	0		95	40	Threshold	100	60	Target	105	100	Maximum	>105	100	
Performance drivers	Weighting																										
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% of business plan achieved	% of 6-month guaranteed pay	Parameter																									
<95	0																										
95	40	Threshold																									
100	60	Target																									
105	100	Maximum																									
>105	100																										

REMUNERATION REPORT CONTINUED

Key elements of Harmony's remuneration structure (continued)

Reward elements	Remuneration strategy												
Short-term incentive (continued)	<p>Safety as a modifier</p> <p>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.</p> <p>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:</p> <table> <tr> <th>Achievement against business plan</th><th>% added or deducted from overall bonus percentage*</th></tr> <tr> <td>100</td><td>10%</td></tr> <tr> <td>95</td><td>5%</td></tr> <tr> <td>90</td><td>0%</td></tr> <tr> <td>85</td><td>-5%</td></tr> <tr> <td>80</td><td>-10%</td></tr> </table> <p><i>*Linear interpolation between these points</i></p> <p>Personal performance modifier:</p> <p>The personal performance percentage will be calculated according to an executive manager's personal performance measured against objectives set out in that executive's performance management contract as follows:</p> <p>Guaranteed pay x group performance against plan x personal performance percentage (0% – 150%)</p>	Achievement against business plan	% added or deducted from overall bonus percentage*	100	10%	95	5%	90	0%	85	-5%	80	-10%
Achievement against business plan	% added or deducted from overall bonus percentage*												
100	10%												
95	5%												
90	0%												
85	-5%												
80	-10%												
Long-term (share-based) incentive	<p>The Harmony share plan (the plan) consists of share appreciation rights (SARs), performance shares and restricted shares.</p> <p>Employees eligible for participation in the plan include executive directors, executive management and management. Non-executive directors do not participate in the plan.</p> <p>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.</p> <p>Rewards are settled in shares, although participants may receive, via our share scheme administrators, cash from the sale of these shares, less tax payable.</p> <p>The main elements of the share plan and performance conditions are summarised below.</p> <p>Share appreciation rights</p> <p>Eligible employees received annual allocations based on a percentage of their guaranteed pay, which vest in equal thirds on the third, fourth and fifth anniversaries of such allocations and lapse in the sixth year. 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.</p> <p>The company has acknowledged shareholders' sentiment with regard to the issuing of share appreciation rights. Share appreciation rights were last allocated in November 2014 (FY15). Existing share appreciation rights will continue until they expire in terms of the provisions agreed to on each allocation.</p>												

Key elements of Harmony's remuneration structure (continued)

Reward elements

Long-term (share-based) incentive
(continued)

Remuneration strategy

Performance shares

Eligible employees receive annual conditional awards of a maximum number of performance shares based on a percentage of guaranteed pay and remuneration category. The conditional award vests after three years, if and to the extent that performance conditions have been satisfied and is subject to the minimum shareholding requirement described below. The conditional awards that do not vest at the end of the three-year period will be forfeited.

Awards made since November 2015 will be measured on the total shareholder return of the company over a three-year period and will be capped at the maximum vesting percentage of 100%. The total shareholder return vesting criteria will comprise two components:

• 50% is based on absolute performance which takes into account the value of the company's share price growth and the value of dividends paid over the measurement period

• 50% is based on the relative performance of the company compared to that of the JSE Gold Index over the measurement period

Absolute performance (share price growth):

Performance	Achievement	Vesting*
Full (stretch)	100%	100%
Target	80%	80%
Threshold	45%	0%

*Linear interpolation will apply between levels

Relative performance (company performance compared to JSE Gold Index):

Performance	Achievement	Vesting*
Full (stretch)	40%	150%
Target	0%	40%
Threshold	-5%	0%

*Linear interpolation will apply between levels

Details of the awards made during FY18 can be found in [Part 2](#) of this Remuneration Report.

Restricted shares

The share plan allows for restricted shares and matching performance shares to be granted to eligible employees at the discretion of the board, based on past performance. The board determines the quantum and balance between restricted shares and matching performance shares.

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. The restricted shares and the matching restricted shares are then settled after the end of a further three-year period.

We acknowledge the sentiments of shareholders with regard to restricted shares and our last grant of restricted shares was made in 2012 and will finally vest in November 2018.

REMUNERATION REPORT CONTINUED

Key elements of Harmony's remuneration structure (continued)

Reward elements	Remuneration strategy
Long-term (share-based) incentive (continued)	<p>Minimum shareholding requirement</p> <p>We have encouraged executive management to retain performance shares when they vest and a minimum shareholding requirement was introduced to achieve this during November 2016. In terms of the approved minimum shareholding requirement, compulsory lock-up of shares would have become applicable in FY20.</p> <p>The minimum shareholder requirement has been revised as part of the new total share incentive plan to be proposed to shareholders at the 2018 annual general meeting.</p> <p>Share plan limit</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 issued 15 690 083 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>
Tlhakanelo Employee Share Trust	<p>The Tlhakanelo Employee Share Trust had a life of five years. The first allocation date was on 31 August 2012 and the first vesting date on 15 March 2013. The fifth and final vesting date was 15 March 2017.</p> <p>With the consent of the board of Harmony, the Trustees of the Trust had resolved to terminate the Trust in accordance with the provisions of the Trust Deed. The Trust was finally wound up in August 2017.</p> <p>At the special general meeting held on 1 February 2018, the shareholders approved the issue of 6.7 million authorised but unissued ordinary shares to the new Harmony Employee Share Option Trust.</p>

BOARD REMUNERATION (NON-EXECUTIVE DIRECTORS)

In considering the proposed fees for non-executive directors, the committee not only looked at general increases in the market place for comparison and alignment purposes but also took account of the fiduciary risks carried by non-executive directors as well as their work load, time commitment, expertise and preparation time expected of each non-executive director.

Harmony's philosophy regarding the remuneration of non-executive directors is to ensure that they are fairly rewarded for their contribution 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 IV, 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, a per day ad hoc fee is paid for special meetings or attending to company business.

Non-executive directors 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 FY19 are set out in the notice of annual general meeting in the *Report to shareholders 2018*.

CONTRACTS, SEVERANCE AND TERMINATION

Executive directors and executive managers have employment contracts with Harmony which include notice periods of up to 90 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 non-binding advisory votes required by King IV on Part One and Part 2 of this remuneration report. For more information refer to the notice of the annual general meeting in the *Report to shareholders 2018*.

In the event that either the remuneration policy or the implementation report, or both are voted against by 25% or more of the voting rights exercised at the 2018 annual general meeting, the committee will in good faith and with the best reasonable effort engage with its shareholders to ascertain the reasons for the dissenting votes and appropriately address legitimate and reasonable objections and concerns raised which may include amending the remuneration policy, or clarifying or adjusting the company's remuneration governance and/or processes.

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.

PROPOSED HARMONY TOTAL INCENTIVE PLAN, 2019

Introduction

With the assistance of remuneration specialists and in consultation with our employees and shareholders, the remuneration committee considered key changes to the long- and short-term incentive plans against market practice.

The following challenges with the current long- and short-term incentive plans were identified:

- Inconsistent vesting due to the volatility of the share price;
- The appropriateness of performance conditions in a dynamic single commodity industry

We have found that institutional investors want the following attributes to be considered within incentive schemes:

- Longer vesting periods (between three and five years) for long-term incentives;
- Simpler variable pay plan
- Plan that encourages share ownership by senior executives
- Clear linkage between pay and performance
- Incentive metrics that better encourage improved sustainability, the generation of free cash flow and capital efficiency
- Incentive measures that mitigate the impact of gold price volatility and other

measures that fall beyond the sphere of management's influence

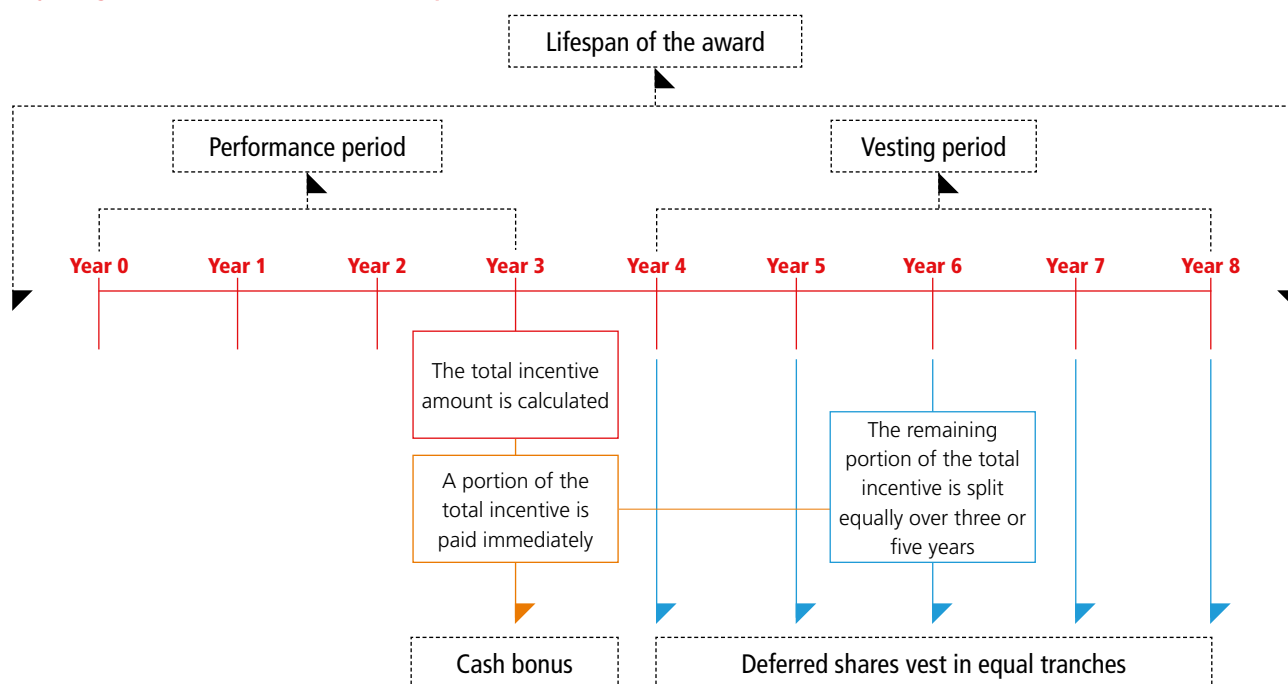
The committee and the board have, as a result, resolved that the short- and long-term incentive plans be replaced with a simplified, market-related total incentive plan (the total incentive plan) to be implemented from 1 July 2019, subject to the approval of the Deferred Share Plan (the DSP) by shareholders at the annual general meeting to be held on 7 December 2018. Refer to the Notice of meeting in the *Report to Shareholders 2018*.

Key features of the total incentive plan:

- A single, combined short- and long-term incentive plan, which represents the group's variable pay offering
- It is simple, transparent and driven entirely by performance against critical, short-, medium- and long-term performance measures
- It comprises:
 - an annual cash payment (paid immediately at the award date)
 - deferred shares (for eligible employees graded as E-band and above), governed by the rules of the DSP
- Performance measures under the total incentive plan are assessed either over one year or a three-year trailing period

- The scheme will be cost neutral compared to the previous scheme
- Awards of deferred shares vest over three or five year periods (depending on the employment level of the participant), which incentivises decision making that promotes long-term sustainability
- The issue and allotment of new shares are limited. A maximum of 5% of issued shares can be used in settlement of awards under the DSP
- The minimum shareholding requirement will continue to apply to prescribed officers (senior executives), aligning their interests more closely with those of shareholders
- Participation in the share incentive has been reduced, resulting in less dilution
- A reduction in the weighting of performance measures linked to the gold price (a factor outside of management's control)
- It introduces a relevant balance of measures on the scorecard (shareholder value, financial and operational indicators, growth and sustainability)
- It incorporates relevant regulatory requirements (e.g. forfeiture King IV)
- It allows for greater accountability for performance over a longer period;
- It endears management to a company that has a clear growth strategy

Key design features of the total incentive plan



REMUNERATION REPORT CONTINUED

Balanced scorecard

The balanced scorecard result will be determined based on a number of key short- and long-term company performance measures (to be measured over the performance period), which will be reviewed and defined annually with appropriate weightings.

Each metric in the balanced scorecard is weighted relative to performance. Each metric has a threshold, target and stretch parameter:

- threshold (minimum requirement to earn at 40%)
- target (minimum requirement to earn at 60%)
- stretch (minimum requirement to earn at 100%)

Distinct weightings will be applied to the group, the South Africa operations and the South-East Asia operations, on a basis that best reflects their underlying focus areas.

The balanced scorecard weighting components for the three distinct groups are presented in the table below.

Weighting of components in the balanced scorecard

	Scorecard component	Group	South Africa operations	South-East Asia operations
Shareholder value	Total shareholder return (absolute)	8.34%	6.67%	6.67%
	Total shareholder return (relative to the JSE Gold Index)	8.33%	6.67%	6.67%
	New: Total shareholder return (relative to the FTSE Gold Mines Index)	8.33%	6.66%	6.66%
Financial and operational	Production	20%	35%	35%
	Total production cost (South Africa operations) and (new) all-in sustaining cost (South-East Asia operations)	15%	20%	20%
	New: Free cash flow	10%	–	–
Growth	New: Development	–	10%	10%
	New: Additions to mineral reserves	10%	–	–
	New: Project execution (for future measurement)	–	–	–
Sustainability	Safety performance: Lost-time injury frequency rate (LTIFR)	15%	15%	15%
	New: Environment, social and governance (ESG)	5%	–	–
Total		100%	100%	100%

The balanced scorecard will be applied to eligible employees as follows:

- **Group:** Prescribed officers, executives in the office of the chief executive officer and all off-shaft services operational managers (South Africa)
- **South Africa operations:** Operational executive managers and all on-shaft operational managers
- **South-East Asia operations:** Operational executive managers and all operational managers

The shareholder roadshows and employee engagements held to discuss the proposed new total incentive plan and balanced scorecard were constructive with positive feedback and dialogue.

Some questions posed by shareholders during the consultations have been addressed as follows:

Shareholder feedback	Harmony's response
Shareholders expressed a preference for longer vesting periods for long-term incentives	In the new plan, the vesting period for deferred shares have been increased to five years for prescribed officers (including executive directors).
Shareholders expressed a concern that the previous 2006 plan was allotted 60 011 669 shares and that another 5% (approximately 25 million shares) of the issued shares (for purposes of the new deferred share plan) will be added to that number	The plan limit of 60 011 669 shares is only applicable to the 2006 Harmony Share Plan and the Tlhakanelo Employee Share Option Plan (the Old Plans). To date 15 690 083 of these shares have been issued. No further awards will be made under the Old Plans (as the Old Plans are in the process of being "wound down"). It is anticipated that a large number of the unissued shares under the Old Plans will be used to settle the historic 2015, 2016 and 2017 awards that vest. We are therefore requesting approval for the directors to allot and issue up to 25 000 000 ordinary shares in order to enable the company to fulfill its obligations under the new deferred share plan. No shares authorised under the Old Plans will be issued under the new deferred share plan.
Shareholders expressed support for malus and clawback policies	Clawback and forfeiture of award ("malus") provisions have been included in the new deferred share plan.
Shareholders asked that the company consider including Return on Capital Employed (ROCE)	Harmony measures total share price performance and cash flow. Project execution will be measured when we embark on a major project (ie. Wafi-Golpu). The success of a project can only be measured over an extended period of time.

The rules of the deferred share plan are included in the Notice of meeting in the *Report to Shareholders 2018* available on the company's website at www.harmony.co.za

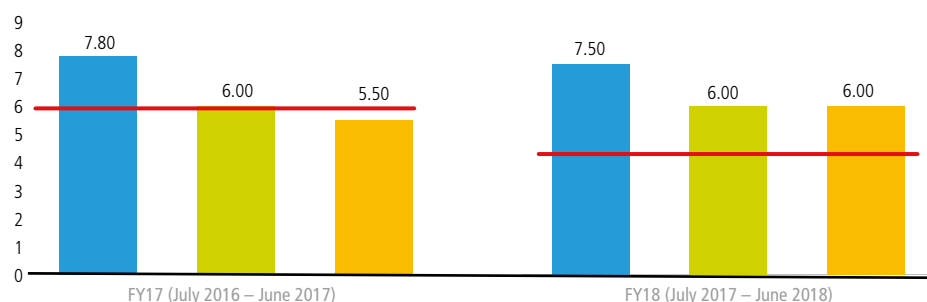
PART 2: IMPLEMENTATION REPORT ON THE POLICY APPLICABLE IN FY18

INCREASES TO GUARANTEED PACKAGE DURING THE YEAR UNDER REVIEW

An assessment of executive remuneration, and short- and long-term incentives was undertaken during FY18.

Taking into consideration the prevailing market conditions, affordability and shareholders' expectations, an average increase of 6% to guaranteed remuneration packages of executives and management was made during FY18. Illustrated below are the average percentage increases awarded during FY17 and FY18 to executives, management and unionised staff:

Unionised staff, management and executive average salary increase (%)



Unionised staff (July every year)	7.80	7.50
Management (January every year)	6.00	6.00
Executives (August every year)	5.50	6.00
Consumer price index	6.05	4.53

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 FY18 (July to December 2017)

Company performance measures	Weighting	% of plan achieved	Weighted %
Total kilograms	40	104	36.8
Total cost (capped at 105%)	30	106	30
Grade	30	100	18
Weighted average	–		84.8
Lost-time injury frequency rate adjustment*		107	–
Percentage of six-months' guaranteed pay**			84.8

* Lost-time injury frequency rate improved but the component was forfeited because of the fatal accidents

** Personal percentage performance modifier:

The personal performance modifier determined for all executive management was a 100%.

Second period FY18 (January to June 2018)

Company performance measures	Weighting	% of plan achieved	Weighted %
Total kilograms	40	101	27.2
Total cost	30	101	20.4
Grade	30	104	27.6
Weighted average	–		75.2
Lost-time injury frequency rate adjustment		101	+10
Percentage of six-months' guaranteed pay**			85.2

** Personal percentage performance modifier:

The personal performance modifier determined for all executive management was a 100%.

REMUNERATION REPORT CONTINUED

LONG-TERM INCENTIVES AWARDED DURING THE YEAR UNDER REVIEW

Share appreciation rights:

No further allocations of share appreciation rights have been made since 2014.

Performance shares:

Performance shares were awarded to eligible participants in November 2017. The performance measure applicable to the performance awards is based on Harmony's total shareholder return over a three-year period. The vesting criteria comprise two components, namely, absolute and relative performance with vesting capped at 100%.

Matched performance shares:

Performance shares that vested and were voluntarily pledged in accordance with the minimum shareholding requirement were matched with additional performance shares.

The number of grants awarded for each executive director and prescribed officer is as set out in the table at the end of this section.

The values at date of grant for awards made during FY18 are illustrated below, assuming a 100% vesting:

Market value at award date

(Rm)



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 2017:

- Share appreciation rights allocated in November 2014**

The 2014 allocation vested in November 2017 and can be exercised in equal thirds on the subsequent anniversaries of the vesting. The value or reward that accrues is based on the positive appreciation of the share price over time and continued employment.

- Performance shares awarded in November 2014**

The vesting percentage of performance shares was based on the total shareholder return of the company compared to that of the gold index over the full three-year period

This resulted in a total vesting of 68% of performance shares awarded in November 2014.

TOTAL REMUNERATION OUTCOMES

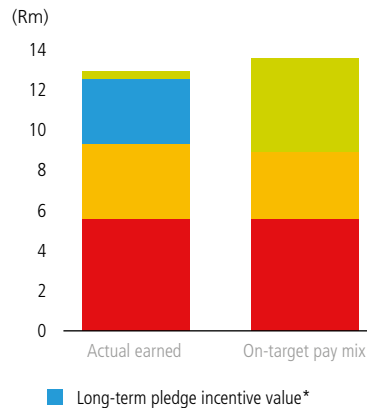
The composition of total remuneration outcomes for FY18 are illustrated below.

Management employees

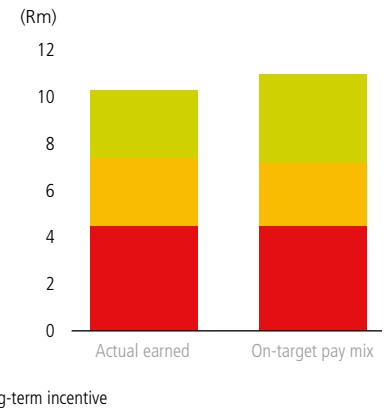
Chief executive officer



Financial director



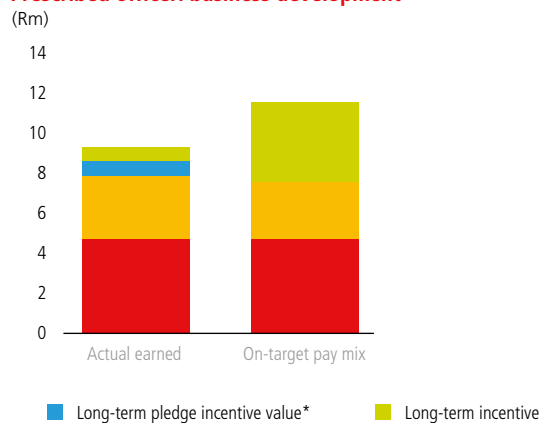
Executive director



Prescribed officer: South Africa operations



Prescribed officer: business development

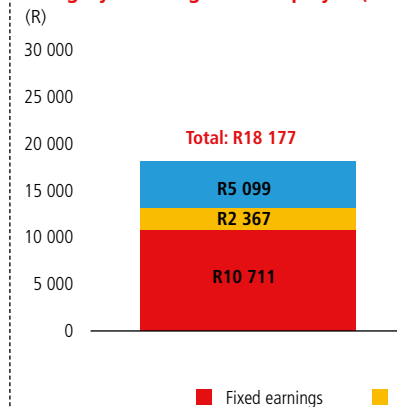


* Value of shares pledged toward minimum shareholding

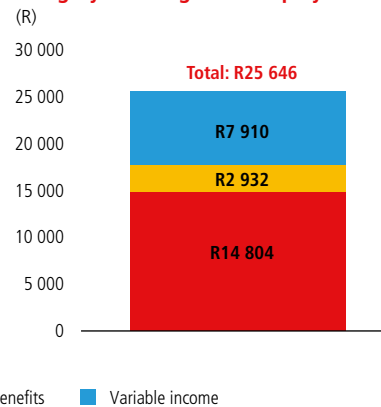
Category 4-8 employees – our commitment to a “living wage”

The average wages and benefits of underground employees for FY18 are illustrated below:

Category 4 underground employee (entry level)



Category 8 underground employee



Each component includes the following:

Fixed earnings: Basic pay, service increment, 13th cheque, living out allowance

Company benefits: Employer provident/pension fund and medical aid

Variable income: Average overtime, shift allowance, average bonus, meal allowance, Unemployment Insurance Fund/skills development levy, insurance benefit

REMUNERATION REPORT CONTINUED

GENDER EQUALITY

The tables below illustrate the gender distribution for employees for all employment categories during FY18.

South Africa

Occupational category	Total workforce	Male		Female	
		Number	(%)	Number	(%)
Board	15	13	87	2	13
Top (executive management)	7	5	71	2	29
Senior management	114	84	74	30	26
Middle management	568	442	78	126	22
Skilled technical workers	4 961	4 129	83	832	17
Semi-skilled workers	10 047	9 152	91	895	9
Unskilled workers	16 820	13 479	80	3 341	20
Total	32 532	27 304	84	5 228	16

Papua New Guinea and Australia

Occupational category	Total workforce	Male		Female	
		Number	(%)	Number	(%)
Top (executive management)	7	7	100	0	0
Senior management	27	23	85	4	15
Middle and junior management	373	325	87	48	13
Skilled technical workers	631	561	89	70	11
Core and critical skills	383	321	84	62	16
Total	1 421	1 237	87	184	13

It is evident that the overall representation of females in the organisation is low.

FAIR AND RESPONSIBLE PAY

In FY18, an average increase of 6% in guaranteed remuneration packages for non-unionised employees and 7.5% for unionised employees was approved.

Unionised employees have consistently received above-inflation increases for the past six years.

NON-EXECUTIVE DIRECTORS' FEES

During May 2018, the remuneration committee considered an industry benchmark on non-executive directors' fees. On recommendation of the remuneration committee, the board proposed an increase in fees of 6% for all non-executive directors to 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 2018*.

Directors' emoluments (R000)

	FY18					FY17
Name	¹ Directors' fees	Salaries and benefits	Retirement savings and contributions	² Bonuses paid	Total	Total
Non-executive directors						
Dr Patrice Motsepe	1 288	–	–	–	1 288	1 150
Joachim Chissano	489	–	–	–	489	610
Fikile De Buck	1 255	–	–	–	1 255	1 080
Ken Dicks	653	–	–	–	653	682
Dr Simo Lushaba	817	–	–	–	817	828
Cathie Markus ³	–	–	–	–	–	438
Modise Motloba	1 399	–	–	–	1 399	1 142
Mavuso Msimang	660	–	–	–	660	582
Karabo Nondumo	762	–	–	–	762	796
Vishnu Pillay	803	–	–	–	803	622
Max Sisulu ⁴	125	–	–	–	125	–
John Wetton	1 053	–	–	–	1 053	1 040
André Wilkens	870	–	–	–	870	721
Executive directors						
Frank Abbott	–	5 404	571	3 976	9 951	7 534
Mashego Mashego	–	3 951	533	2 879	7 363	5 597
Peter Steenkamp	–	7 656	1 291	5 969	14 916	11 232
Prescribed officers						
Beyers Nel	–	4 741	697	2 854	8 292	6 577
Phillip Tobias	–	4 495	574	3 357	8 426	6 238
Johannes van Heerden ⁵	–	6 104	249	3 539	9 892	7 650
Total	10 174	32 351	3 915	22 574	69 014	54 519

¹ Directors' remuneration excludes value added tax

² Reflects amounts actually paid during the year

³ Resigned as non-executive director on 9 February 2017

⁴ Appointed as non-executive director on 31 January 2018

⁵ Salary is paid in Australian dollars and is influenced by movements in the exchange rate

REMUNERATION REPORT CONTINUED

EXECUTIVE DIRECTORS AND MANAGEMENT SHARE INCENTIVES

As at 30 June 2018

	Executive directors				Prescribed officers				Other		Total	
	Peter Steenkamp	Frank Abbott	Mashego Mashego	Johannes van Heerden	Beyers Nel	Phillip Tobias	Number of awards	Average price of awards (SA rand)	Number of awards	Average price of awards (SA rand)		
Movements on share incentives	Number of awards	Average price of awards (SA rand)	Number of awards	Average price of awards (SA rand)	Number of awards	Average price of awards (SA rand)	Number of awards	Average price of awards (SA rand)	Number of awards	Average price of awards (SA rand)	Number of awards	Average price of awards (SA rand)
Performance shares	932 423	n/a	757 564	n/a	486 916	n/a	505 248	n/a	33 133 754	n/a	37 848 573	n/a
	596 427	n/a	251 722	n/a	293 554	n/a	293 554	n/a	12 050 182	n/a	14 127 808	n/a
	–	n/a	–	n/a	24 933	n/a	31 166	n/a	81 455	n/a	278 629	n/a
	–	n/a	(101 807)	n/a	(24 933)	n/a	(31 166)	n/a	(3 472 679)	n/a	(3 873 467)	n/a
	–	n/a	–	24.56	–	24.56	–	24.56	–	35.20	–	32.85
	–	–	2 516 669	2 500 390	612 357	765 440	–	–	135 473 327	–	141 868 183	–
	–	n/a	(47 908)	n/a	(48 397)	n/a	(60 496)	n/a	(5 683 163)	n/a	(5 954 259)	n/a
	1 528 850	n/a	859 571	n/a	732 073	n/a	738 306	n/a	36 109 549	n/a	42 427 284	n/a
	–	n/a	62 776	n/a	40 084	n/a	–	n/a	435 232	n/a	701 412	n/a
	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a
Restricted shares	–	n/a	(16 000)	n/a	(8 000)	n/a	–	n/a	(64 000)	n/a	(120 000)	n/a
	–	n/a	–	24.63	–	24.63	–	n/a	–	24.63	–	24.63
	–	394 071	394 071	394 071	197 035	–	–	–	1 576 282	–	2 955 530	–
	–	n/a	–	n/a	–	n/a	–	n/a	(30 416)	n/a	(30 416)	n/a
	–	n/a	46 776	n/a	32 084	n/a	–	n/a	340 816	n/a	550 996	n/a
	–	n/a	101 180	34.39	76 580	34.01	46 850	18.41	12 011 545	32.60	12 476 697	32.60
	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a
	–	n/a	–	n/a	–	n/a	–	n/a	(794 351)	n/a	(794 351)	n/a
	–	n/a	–	n/a	–	n/a	–	n/a	–	24.37	–	24.37
	–	–	–	–	–	–	–	–	19 362 208	–	19 362 208	–
Share appreciation rights	–	n/a	(5 361)	104.79	(4 620)	104.79	–	n/a	(1 812 559)	78.46	(1 834 486)	52.86
	–	n/a	95 819	56.31	71 960	56.31	46 850	18.41	9 404 635	50.11	9 847 860	50.20
	–	n/a	2 910 740	2 894 461	809 392	795 440	–	–	156 411 817	–	164 185 921	–
	–	394 071	–	–	–	–	–	–	–	–	–	–
	–	n/a	104.79	104.79	–	–	–	–	–	–	–	–
	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a
	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a
	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a
	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a
	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a	–	n/a

EXECUTIVE DIRECTORS AND MANAGEMENT SHARE INCENTIVES continued
As at 30 June 2018

Outstanding awards (listed by allocation date)	Executive directors				Prescribed officers				Other		Total	
	Peter Steenkamp	Frank Abbott		Mashego Mashego		Johannes van Heerden		Beyers Nel		Phillip Tobias		
		Number of awards	Average price (SA rand)	Number of awards	Average price (SA rand)	Number of awards	Average price (SA rand)	Number of awards	Average price (SA rand)	Number of awards		Average price (SA rand)
Performance shares	1 528 850	1 557 532	859 571	901 403	732 073	738 306	36 109 549	42 427 284				
16 November 2015	–	n/a	455 758	n/a	236 220	n/a	17 829 438	n/a	19 950 203	n/a		
17 February 2016	512 000	n/a	–	n/a	–	n/a	–	n/a	512 000	n/a		
29 November 2016	420 423	n/a	152 091	n/a	177 366	n/a	6 950 408	n/a	8 360 578	n/a		
15 November 2017	596 427	n/a	251 722	n/a	318 487	n/a	11 329 703	n/a	13 604 503	n/a		
Restricted shares	–	84 544	46 776	46 776	32 084	–	340 816	550 996				
16 November 2012	–	n/a	11 694	n/a	8 021	n/a	85 204	n/a	137 749	n/a		
16 November 2015 (2012 award – matching shares)	–	n/a	35 082	n/a	24 063	n/a	255 612	n/a	413 247	n/a		
Share appreciation rights	–	132 777	95 819	95 819	71 960	46 850	9 404 635	9 847 860				
16 November 2012	–	n/a	11 694	68.84	8 021	68.84	1 079 897	68.84	1 127 510	68.84		
15 November 2013	–	n/a	38 212	33.18	26 459	33.18	3 735 292	33.18	3 891 126	33.18		
17 November 2014	–	n/a	45 913	18.41	37 480	18.41	4 589 446	18.41	4 829 224	18.41		
Closing balance at 30 June 2018	1 528 850	1 774 853	1 002 166	1 043 998	836 117	785 156	45 855 000	52 826 140				

¹ Performance shares granted in terms of vested awards pledged pursuant to the minimum shareholding requirement

ASSURANCE REPORT

Introduction

We have been engaged to perform an independent assurance engagement for Harmony Gold Mining Company Limited ("Harmony") on selected sustainability information reported in Harmony's Annual Integrated Report for the year ended 30 June 2018 (the "Report"). Our engagement was conducted by an independent multi-disciplinary team with relevant experience in reporting and assurance.

Subject matter

We are required to provide reasonable and limited levels assurance on the following sustainability indicators (KPIs) to be published in the Annual Integrated Report:

Reasonable assurance

The following KPIs in the Report were selected for an expression of reasonable assurance:

- Electricity purchased (kWh)
- Total Scope 2 carbon emissions (t CO₂e)
- Preferential procurement – black economic empowerment total spend (South African rands)
- Local economic development (LED) spend (South African rands)
- Employment equity in management in South Africa (%)

Limited assurance

The following KPIs in the Report were selected for an expression of limited assurance:

- Housing and living conditions – average number of employees in single or sharing Harmony accommodation
- Water used for primary activities (kilolitres)
- Lost-time injury frequency rate (LTIFR)
- Total injuries and accidents (TIA) – number of injury cases in the 2018 reporting period
- Silicosis – number of cases confirmed in the 2018 reporting period
- Critical skills training – number of people trained in the 2018 reporting period
- Total Scope 1 carbon emissions (t CO₂e)
- Total Scope 3 carbon emissions (t CO₂e)
- Mineral waste (volume disposed)
- Corporate social investment spend in the 2018 reporting period

Directors' responsibilities

The Directors are responsible for the selection, preparation and presentation of the KPIs, the identification of stakeholders requirements and material issues, for commitments with respect to sustainability performance, and establishing and maintaining appropriate performance management and internal control systems from which the reported information is derived, and for such internal control as the directors determine to be necessary to enable the preparation of the selected sustainability information that is free from material misstatement, whether due to fraud or error.

The Directors are also responsible for the selection and application of the reporting criteria in line with the GRI.

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 certain 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 judgments. The precision thereof may change over time.

In particular, where the information relies on the factors derived by independent third parties, our assurance work will not include examination of the derivation of those factors and other third party information. It is important to understand our assurance conclusions in this context.

Our independence and quality control

We have complied with the independence and all other ethical requirements of the Code of Professional Conduct for Registered Auditors issued by the Independent Regulatory Board of Auditors, which is founded on fundamental

principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

SNG Grant Thornton applies the International Standard on Quality Control and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our responsibility

Our responsibility is to express an independent conclusion, based on the reasonable assurance procedures we have performed and the evidence we have obtained. We conducted our reasonable assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised), Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. That Standard requires that we plan and perform our engagement to obtain either reasonable or limited assurance about whether the Selected Sustainability Information is free from material misstatement.

We further have a responsibility to form an independent conclusion, based on the limited assurance procedures we have performed and the evidence we have obtained, 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 ISAE 3000 (Revised).

A reasonable assurance engagement in accordance with ISAE 3000 (Revised) involves performing procedures to obtain evidence about the quantification of the selected sustainability information and related disclosures. The nature, timing and extent of procedures selected depend on our judgement, including the assessment of the risks of material misstatement, whether due to fraud or error. In making those risk assessments we considered internal control relevant to Harmony's preparation of the selected sustainability information.

A reasonable assurance engagement also includes:

- Assessing the suitability in the circumstances of Harmony's use of its reporting criteria as the basis for preparing the selected sustainability information;
- Evaluating the appropriateness of quantification methods and reporting policies used, and the reasonableness of estimates made by Harmony; and
- Evaluating the overall presentation of the selected sustainability KPIs.

For a limited assurance engagement, the extent of evidence gathering procedures performed is less than that of a reasonable assurance engagement and therefore a lower level of assurance is provided.

Summary of work performed

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 judgments 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.

Our procedures included the understanding of risk assessment procedures, internal control, and the procedures performed in response to the assessed risks. The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.

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

- Interviewed management and senior executives to obtain an understanding of the internal control environment, risk assessment process and information systems relevant to the sustainability reporting process.
- Inspected documentation to corroborate the statements obtained from

management and senior executives in our interviews.

- Reviewed the process that Harmony has in place for determining material selected sustainability information to be included in the report
- Applied the assurance criteria in evaluating the data generation and reporting processes.
- Reviewed the processes and systems to generate, collate, aggregate, monitor and report on the selected key performance indicators.
- Conducted interviews with senior management to evaluate reporting processes against the GRI guidelines.
- Evaluated the reasonableness and appropriateness of significant estimates and judgments made by management in the preparation of the selected sustainability information.
- Performed limited substantive testing on a selective basis of the total CO₂ emissions information at corporate head offices and three reporting locations to check that data had been appropriately measured, recorded, collated and reported.
- Evaluated whether the selected sustainability information presented in the integrated report is consistent with our overall knowledge and experience of sustainability management and performance at Harmony.

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

Conclusions

Reasonable assurance

In our opinion the selected sustainability information for the year ended 30 June 2018, which has been subject to our reasonable assurance procedures, has in all material respects, been prepared in accordance with the reporting criteria.

Limited assurance

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the selected sustainability information for the year ended 30 June 2018, has not been prepared and presented, in all material respects, in accordance with the reporting criteria.

Other matters

The scope of our work has been limited to the aforementioned KPIs. Our conclusions above cover only these indicators and not all indicators presented or any other information included in the Report. The maintenance and integrity of Harmony's website is the responsibility of Harmony's directors. Our procedures did not involve assurance on the maintenance and integrity of the website, including controls used to achieve this 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 its presentation on the Harmony website.

Restriction of liability

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

SNG Grant Thornton

Registered auditor

Fikile Zwane

Director

25 October 2018

Johannesburg

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 in *Operational performance*.

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 JSE. Harmony's ordinary shares are also listed in the form of American Depositary Receipts on the New York Stock Exchange.

Annual integrated report 2018

As required by the King IV Report on Governance for South Africa, 2016 (King IV report) and the JSE Listings Requirements, the board has reviewed and approved the Integrated Annual Report 2018 on the recommendation of the audit and risk committee, supported by the social and ethics committee.

Statement by the board

The board of directors is of the opinion that the Integrated Annual Report 2018 and the accompanying consolidated financial statements fairly reflect the true financial position of the group at 30 June 2018 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 overleaf.

Board of directors

On 31 January 2018, the board appointed Mr Max Vuyisile Sisulu as an independent non-executive director.

The board appointed Mr Mavuso Msimang as the new lead independent director, effective 10 May 2018. Further changes include the restructuring of the board committees as explained in more detail in *Corporate Governance*.

Directors' shareholdings

At 30 June 2018, the financial director, Frank Abbott, held 747 817 shares and executive director, Mashego Mashego, held 593 shares in Harmony while non-executive directors André Wilkens and Ken Dicks, held 101 301 and 35 000 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 FY18. Refer to the *Remuneration report* for details of share incentives awarded to executive directors.

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
- 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 2018

Financial results

Details of the group's financial performance are discussed in the Financial Director's Report. The audited consolidated and company annual financial statements are included in the Financial Report 2018 which is available online at www.har.co.za.

Share capital

During June 2018, a total of 55 055 050 new ordinary shares were placed at a price of R19.12 per share, raising gross proceeds of R1 053 million (US\$80 million). Costs directly attributable to the issue of the shares amounted to R49 million (US\$3.7 million).

Harmony conducted a placement of new ordinary shares to qualifying investors to raise proceeds to pay down part of the outstanding bridge loan raised for the acquisition of the Moab Khotsong operations. The placement was conducted through an accelerated bookbuild.

Full details of the authorised, issued and unissued share capital of the company as at 30 June 2018 are set out in the consolidated statements of changes in shareholders' equity in the Financial Report 2018 (www.har.co.za).

Shareholders

Information on shareholder spread, the range of shareholdings and public shareholders, as well as major shareholders, is presented in the Shareholders' information section in this Integrated Annual Report 2018.

Investments

A schedule of investments in subsidiaries, associates and joint arrangements appears in the Financial Report 2018 (www.har.co.za).

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 36 of the consolidated financial statements for further discussion.

Borrowings

(i) Movement in borrowings: see note 29 to the consolidated financial statements

(ii) Borrowing powers are detailed in the company's memorandum of incorporation

Disposals

There were no material disposals during FY18.

Acquisitions

On 19 October 2017, Harmony announced the proposed acquisition of AngloGold Ashanti Limited's Moab Khotsong and Great Noliigwa mines together with other assets and related infrastructure (Moab Khotsong operations), for a cash consideration of the rand equivalent of US\$300 million. All conditions precedent were completed on 20 February 2018. The transaction became effective on 1 March 2018 when Harmony gained control of the Moab Khotsong operations.

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 discussed below.

Modise Motloba, Harmony's deputy chairman, is a director of Tsys Limited. Tsys Limited entered into a contract with the group in February 2017 to provide services relating to the group's small and medium enterprise development projects. Approximately R6 million was paid to Tsys Limited during FY18. The contract has a 30-day notice period.

Material transactions with associates, joint arrangements and structured entities

Refer to note 34 of the consolidated financial statements for details on transactions conducted during the period under review.

Recent developments

On 12 July 2018, shareholders approved the special resolution to issue 11 032 623 new ordinary shares to African Rainbow Minerals Limited at the placing price of R19.12 (ARM Placing). The proceeds of R211 million (US\$16 million) raised from the ARM Placing were used to repay part of the outstanding bridge loan raised for the acquisition of the Moab Khotsong operations.

On 18 July 2018, the remaining outstanding balance of US\$50 million (R670 million) was repaid on the US\$200 million bridge loan.

On 4 October 2018, Harmony reached a mutually acceptable settlement with the Financial Sector Conduct Authority of South Africa. The dispute related to incorrect financial results reported for the March 2007 quarter. Harmony informed shareholders and the authorities of the error in August 2007. Subsequently Harmony reviewed all financial accounting procedures and systems to ensure that a similar error would not occur. Following various discussions with the authorities, an administrative penalty of R30 million was imposed and paid by Harmony.

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 2018, 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.

Riana Bisschoff

Company secretary

25 October 2018

SHAREHOLDER INFORMATION

STOCK EXCHANGE LISTINGS AND TICKER CODES

Harmony's primary listing is on the Johannesburg Stock Exchange. It is also quoted in the form of American depositary receipts on the New York Stock Exchange.

Harmony's ticker codes on these exchanges are as follows:

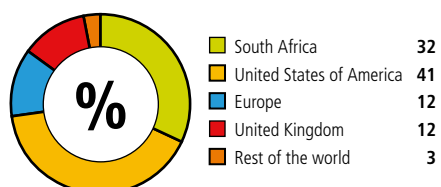
Johannesburg Stock Exchange	HAR
New York Stock Exchange	HMY

SHARE INFORMATION

Sector	Resources
Sub-sector	Gold
Issued share capital as at 30 June 2018	500 251 751
Market capitalisation	
at 30 June 2018	R10.6 billion or US\$769 million
at 30 June 2017	R9.5 billion or US\$728 million
Share price statistics – FY18	
Johannesburg Stock Exchange:	12-month high R28.80
	12-month low R19.24
	Closing price as at 30 June 2018 R21.22
New York Stock Exchange:	12-month high US\$2.50
	12-month low US\$1.52
	Closing price as at 30 June 2018 US\$1.56
Free float	100%
ADR ratio	1:1

Geographic distribution of shares (%)

as at 30 June 2018



Shareholder spread as at 30 June 2018

	Number of shareholders	% of shareholders	Number of shares	% of issued share capital
Public	8 486	99.91	435 686 737	87.09
Non-public	8	0.09	64 565 014	12.91
Share option scheme	2	0.02	47 046	0.01
Holding 10% +	1	0.01	63 632 922	12.72
Directors*	4	0.05	884 711	0.18
Subsidiaries	1	0.01	335	0.00
Totals	8 494	100.00	500 251 751	100.00

* Held by Frank Abbott, Ken Dicks, Mashego Mashego and André Wilkens

Analysis of ordinary shares	Number of shareholders	% of shareholders	Number of shares	% of issued share capital
Range				
1 – 10 000	8 049	94.76	4 985 217	1.00
10 001 – 100 000	301	3.54	9 491 682	1.90
100 001 – 1 000 000	112	1.32	41 645 476	8.32
1 000 001 – And more	32	0.38	444 129 376	88.78
Totals	8 494	100.00	500 251 751	100.00

Ownership summary as at 30 June 2018 – top 10 shareholders

Rank	Institution	% Total shares outstanding 30 June 2018
1	African Rainbow Minerals Ltd*	12.72
2	VanEck Global	11.58
3	Public Investment Corporation of South Africa	4.34
4	Dimensional Fund Advisors, Inc.	3.26
5	Fairtree Capital	2.88
6	RMB Morgan Stanley	2.80
7	Investec Asset Management	2.80
8	Exor Investments (UK) LLP	2.71
9	The Vanguard Group, Inc.	2.46
10	BlackRock Investment Management – Index	1.90

* On 12 July 2018 shareholders approved a resolution to issue 11 032 623 new ordinary shares to African Rainbow Minerals Limited (ARM) to maintain ARM's shareholding at approximately 14.29%

SHAREHOLDER INFORMATION CONTINUED

DIVIDEND POLICY

In considering the payment of dividends, the board will, with the assistance of the audit and risk, and the 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

Dividends declared

FY18:

No dividend declared

FY17:

Interim: Dividend of 50 South African cents per share (4 US cents per share)

Final: Dividend of 35 South African cents per share (3 US cents per share)

SHAREHOLDERS' DIARY

Financial year-end	30 June
Annual financial statements issued	25 October 2018
Form 20-F issued	25 October 2018
Annual general meeting	7 December 2018
Results presentations FY19:	
Interim results	February 2019
Full-year results	August 2019

CONTACT

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Mobile: +27 (0)82 759 1775

Telephone: +27 11 411 2314

Website: www.harmony.co.za

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of the safe harbour provided by Section 21E of the Exchange Act and Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), 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 forward-looking statements, including, among others, those relating to our future business prospects, revenues, and the potential benefit of acquisitions (including statements regarding growth and cost savings) wherever they may occur in this report and the exhibits, are necessarily 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 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; estimates of provision for silicosis settlement; statements regarding future debt repayments; estimates of future capital expenditures; the success of our business strategy, development activities and other initiatives; future financial position, plans, strategies, objectives, capital expenditures, projected costs and anticipated cost savings and financing plans; 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, as well as at existing operations; 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 and the availability, terms and deployment of capital; changes in government regulation and the political environment, particularly tax, mining rights, environmental regulation and business ownership including any interpretation thereof; fluctuations in exchange rates and currency devaluations and other macroeconomic monetary policies; the adequacy of the Group's insurance coverage; and socio-economic or political instability in South Africa, Papua New Guinea, Australia and other countries in which we operate.

The foregoing factors and others described under "Risk Factors" should not be construed as exhaustive.

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 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. All subsequent written or oral forward-looking statements attributable to Harmony or any person acting on its behalf are qualified by the cautionary statements herein.

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

Randfontein Office Park
PO Box 2
Randfontein, 1760
South Africa

Corner Main Reef Road and Ward Avenue
Randfontein, 1759
South Africa

Telephone: +27 11 411 2000
Website: www.harmony.co.za

DIRECTORS

Dr PT Motsepe* (chairman)
M Msimang**^ (lead independent director)
JM Motloba**^ (deputy chairman)
PW Steenkamp (chief executive officer)
F Abbott (financial director)
JA Chissano*¹^
FFT De Buck*^
KV Dicks*^
Dr DSS Lushaba*^
HE Mashego**
KT Nondumo*^
VP Pillay*^
MV Sisulu*^
JL Wetton*^
AJ Wilkens*

* Non-executive

** Executive

^ Independent

¹ Mozambican

INVESTOR RELATIONS

E-mail: HarmonyIR@harmony.co.za
Telephone: +27 11 411 2314
Website: www.harmony.co.za

COMPANY SECRETARY

Telephone: +27 11 411 2094
E-mail: companysecretariat@harmony.co.za

TRANSFER SECRETARIES

Link Market Services South Africa (Proprietary) Limited

(Registration number 2000/007239/07)

13th Floor, Rennie House,
Ameshoff Street, Braamfontein
PO Box 4844
Johannesburg, 2000
South Africa

Telephone: +27 11 713 0800
E-mail: info@linkmarketservices.co.za
Fax: +27 86 674 2450

ADR* DEPOSITORY

Deutsche Bank Trust Company Americas c/o American Stock Transfer and Trust Company

Peck Slip Station
PO Box 2050
New York, NY 10272-2050

E-mail queries: db@astfinancial.com
Toll free: +1-800-937-5449
Int: +1-718-921-8124
Fax: +1-718-765-8782

*ADR: American Depositary Receipts

SPONSOR

JP Morgan Equities South Africa (Pty) Ltd

1 Fricker Road, corner Hurlingham Road
Illovo, Johannesburg, 2196
Private Bag X9936 Sandton, 2146

Telephone: +27 11 507 0300
Fax: +27 11 507 0503

TRADING SYMBOLS

JSE: HAR
New York Stock Exchange: HMY
ISIN: ZAE 000015228

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