

# OPERATIONAL PERFORMANCE

## Bambanani

		FY17	FY16	FY15
<b>Number of employees</b>				
– Permanent		1 464	1 491	1 517
– Contractors		205	321	330
Total		1 669	1 812	1 847
<b>Operational</b>				
Volumes milled	(000t) (metric)	231	232	229
	(000t) (imperial)	254	256	253
Gold produced	(kg)	2 750	3 013	2 908
	(oz)	88 415	96 870	93 495
Gold sold	(kg)	2 745	3 015	2 947
	(oz)	88 253	96 934	94 748
Grade	(g/t)	11.90	12.99	12.70
	(oz/t)	0.348	0.378	0.370
Productivity	(g/TEC)	148.42	156.54	153.08
<b>Development results</b>				
Total metres		1 591	1 743	1 150
Reef metres		130	105	15
Capital metres		0	0	0
<b>Financial</b>				
Revenue	(Rm)	1 576	1 617	1 330
	(US\$m)	116	112	116
Average gold price received	(R/kg)	574 227	536 410	451 200
	(US\$/oz)	1 314	1 151	1 226
Cash operating cost	(Rm)	874	808	697
	(US\$m)	64	56	61
Production profit/(loss)	(Rm)	705	806	625
	(US\$m)	52	56	55
Capital expenditure	(Rm)	77	106	110
	(US\$m)	6	7	10
Cash operating cost	(R/kg)	317 833	268 305	239 552
	(US\$/oz)	727	576	651
All-in sustaining cost	(R/kg)	357 025	304 634	270 623
	(US\$/oz)	817	654	735
<b>Safety</b>				
Number of fatalities		1	0	1
Lost-time injury frequency rate per million hours worked		5.23	3.59	4.63
<b>Environment</b>				
Electricity consumption	(GWh)	143	140	133
Water consumption – primary activities	(ML)	1 200	1 434	1 731
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	141	142	137
Intensity data per tonne treated				
– energy		0.64	0.60	0.59
– water		5.19	6.18	7.57
– greenhouse gas emissions		0.64	0.60	0.61
Number of reportable environmental incidents		0	0	0
<b>Community</b>				
Local economic development	(Rm)	14	9	3
Training and development	(Rm)	20	25	17

## Bambanani *continued*

### Other salient features

Status of operation	Mature operation with focus on mining of the shaft pillar for the next few years after which it will be at the end of its operating life
Life of mine	5 years
Nameplate hoisting capacity (per month)	32 000 tonnes (35 000 tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 – not certified but operates according to standards requirements ISO 9001 OHSAS 18001

### Mineral reserves as at 30 June 2017

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	1.1	11.54	12	–	–	–	1.1	11.54	12
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	1.2	0.337	401	–	–	–	1.2	0.337	401

Bambanani, located in the Free State Province, near Welkom and about 262km from Johannesburg, has two surface shafts (the East and West shafts). Mining is conducted to a depth of 2 365m. Activities at the mine focus on the Basal Reef and are limited to shaft pillar extraction. The ore mined is sent to Harmony One Plant for processing. Given the high risk of seismicity at Bambanani, efforts are focused on managing support systems and the rehabilitation of areas with challenging ground conditions.

Regrettably, one fatality occurred at Bambanani in FY17. Focus on safety and fatal risk management has further intensified as we strive for zero harm.

Bambanani is Harmony's most profitable mine despite gold production decreasing by 9% to 2 750kg (88 415oz) in FY17. This was primarily due to decline in the recovered grade by 8% to 11.90g/t after an exceptional grade performance in FY16 remained flat year on year at 231 000 tonnes (254 000 tons) in FY17.

Revenue was down by 3% to R1 576 million (4% increase to US\$116 million) mainly due to lower production in FY17.

Cash operating costs increased by 8% to R874 million (or 14% to US\$64 million), mainly due to the increase in annual wages and electricity tariffs.

Capital expenditure decreased by 27% to R77 million (a decrease of 14% to US\$6 million). The decrease was due reduced capital spending as the Bambanani shaft pillar major capital project was completed at the end of FY17.