

## UNIQUE CHALLENGES FOR UNDERGROUND MINES IN AFRICA

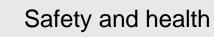
3 February 2017

JSE (HAR) NYSE (HMY) **Arlington Conference** 

### AGENDA

Mining in SA for more than 66 years





Deep level gold mining challenges



3

Sustainable cash flows



Conclusion



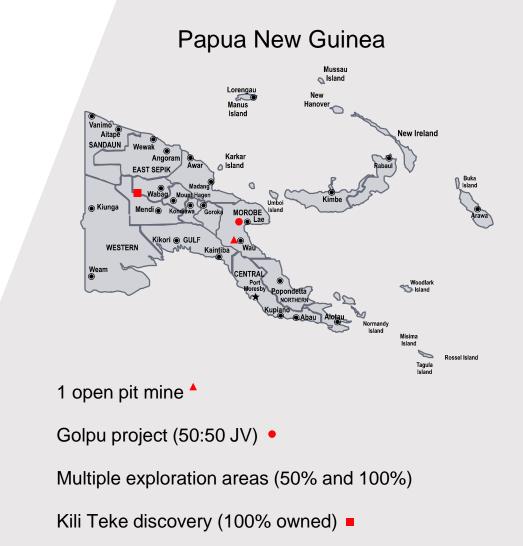


## MINING IN SOUTH AFRICA FOR MORE THAN 66 YEARS

#### MINING IN SOUTH AFRICAN AND PNG



Listed on JSE and NYSE 9 underground operations •• 1 open pit mine Multiple surface sources •



### DRIVEN BY OUR STRATEGY TO PRODUCE SAFE, PROFITABLE OUNCES



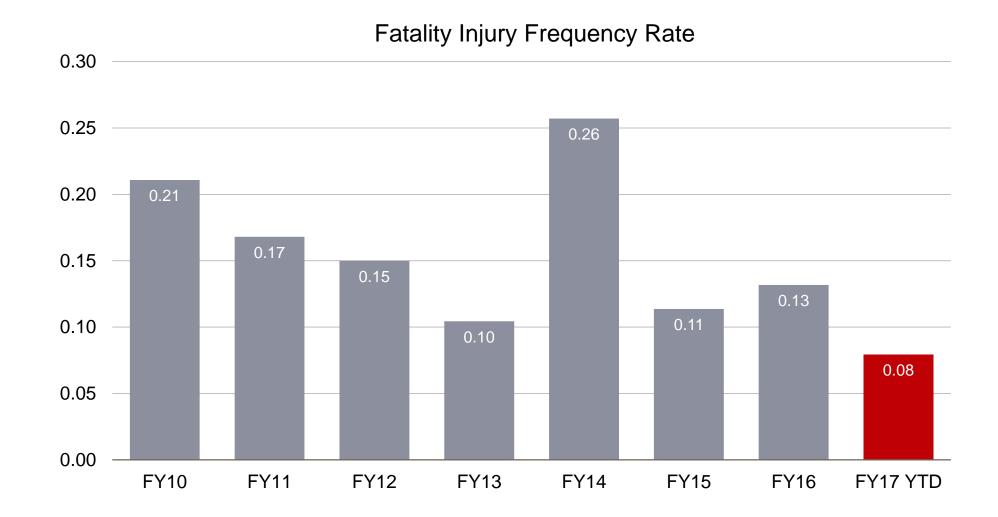
- Safety rates improving lower than combined rate for main gold producers
- 8% increase in gold production
- Grade continues upward trend 3% increase to 5.04g/t
- Only a 4% increase in all-in sustaining costs at R510 506/kg (14% to US\$1 136/oz)
- R627 million (US\$45 million) cash inflows from hedging
- Headline earnings of 150 SA cents (11 US cents)
- On track to meet production guidance
- Interim dividend of 50 SA cents (4 US cents)

LTI: Lost time injury FIFR: Fatal injury frequency rate



## **SAFETY AND HEALTH**

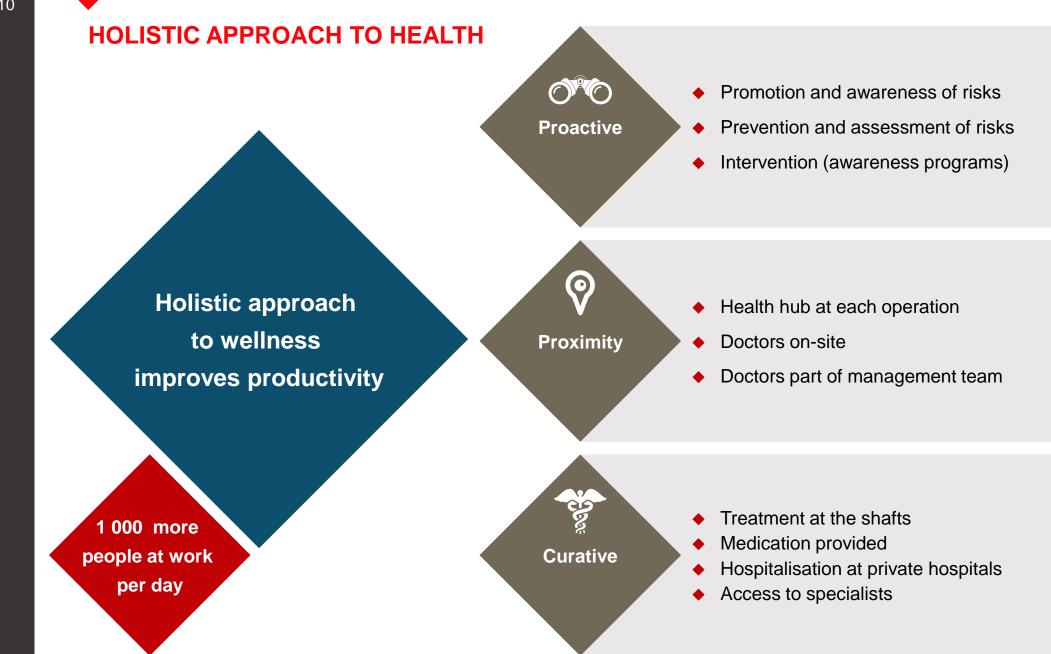
#### WORKING TOWARDS ZERO HARM



### NOTABLE SAFETY ACHIEVEMENTS

- No underground fatality during the December 2016 quarter
- Tshepong achieved its first ever 2 500 000 Fatality Free Shifts (FFS) on 27 October 2016, a total of 794 days fatal free
- Doornkop achieved its first ever 2 000 000 FFS on 17 December 2016, a total of 872 days fatal free
- The Free State Surface Sources reported 3 500 000 FFS on 16 November 2016 (159 months fatal free – just more than 13 years)
- Injury free (white flag) months at
  - Unisel (December 2016)
  - Bambanani (September, November and December 2016)
  - Joel (October 2016)







## DEEP LEVEL GOLD MINING CHALLENGES

### ANATOMY OF A DEEP LEVEL UNDERGROUND GOLD MINE



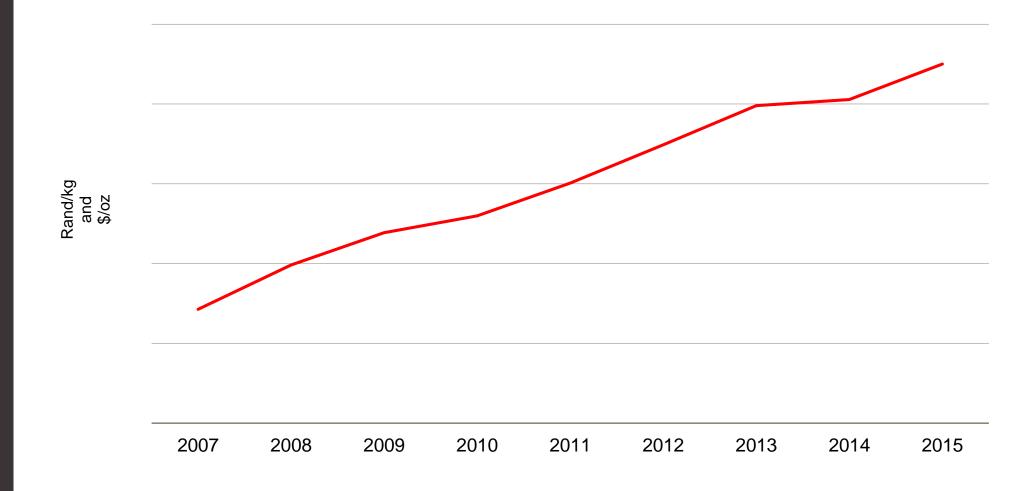
© Harmony | 201<sup>.</sup>

#### CHALLENGES

- Safety and health
- Distance to the work place
- Environmental conditions
- Hard rock stress
- Human resources
- Ore body flexibility



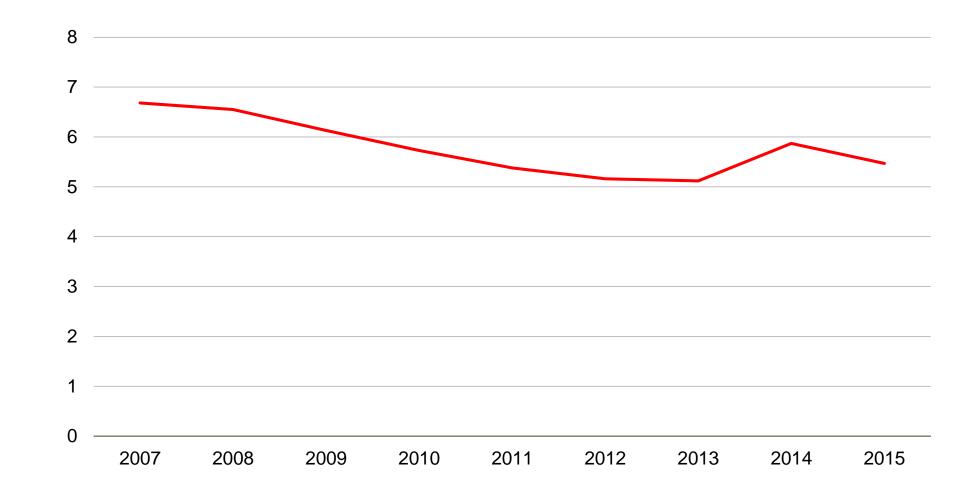
### **INDUSTRY TREND OF INCREASE IN UNIT COST**



14

#### **DECLINING UNDERGROUND GRADES AND DEPLETING RESERVES**

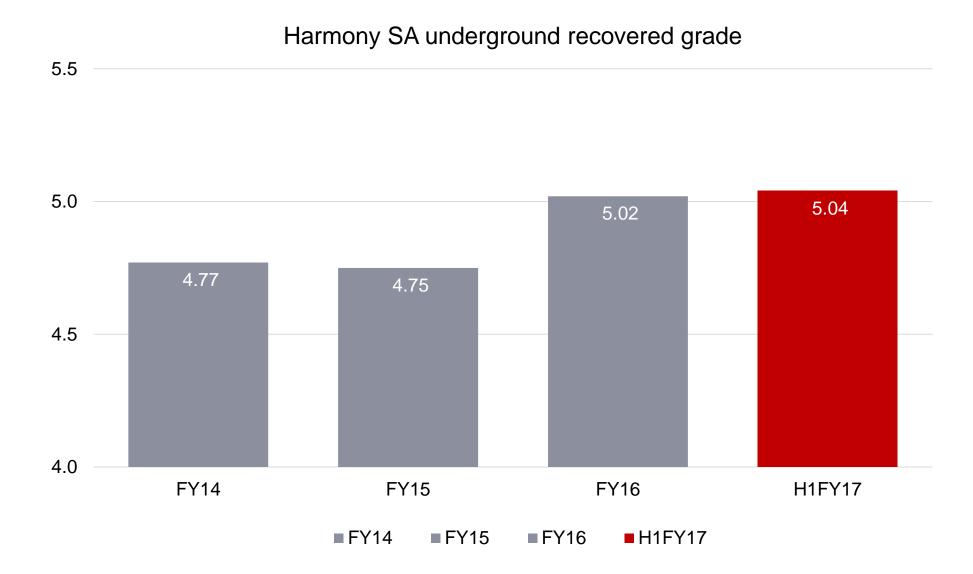
Underground recovered grade – SA gold mining industry



HARMONY

15

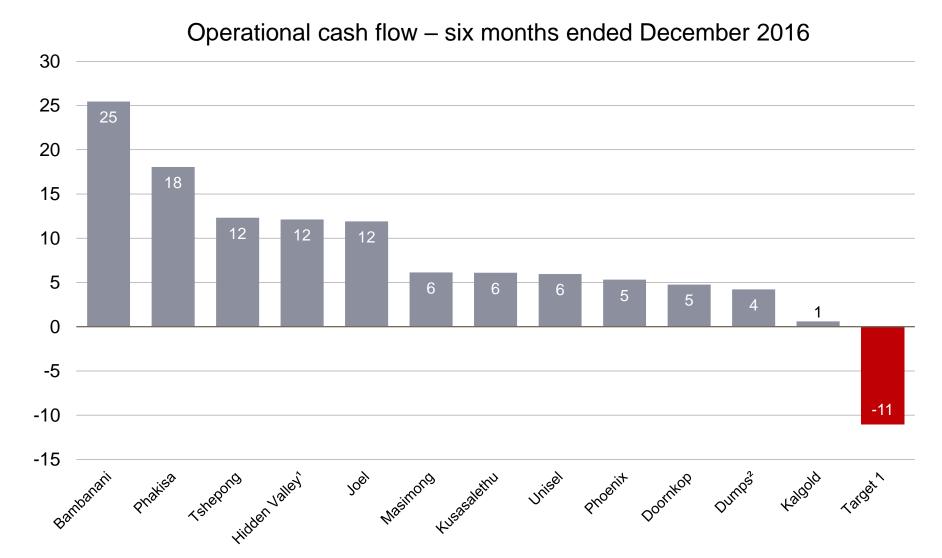
#### **GRADE CONTINUES UPWARD TREND**





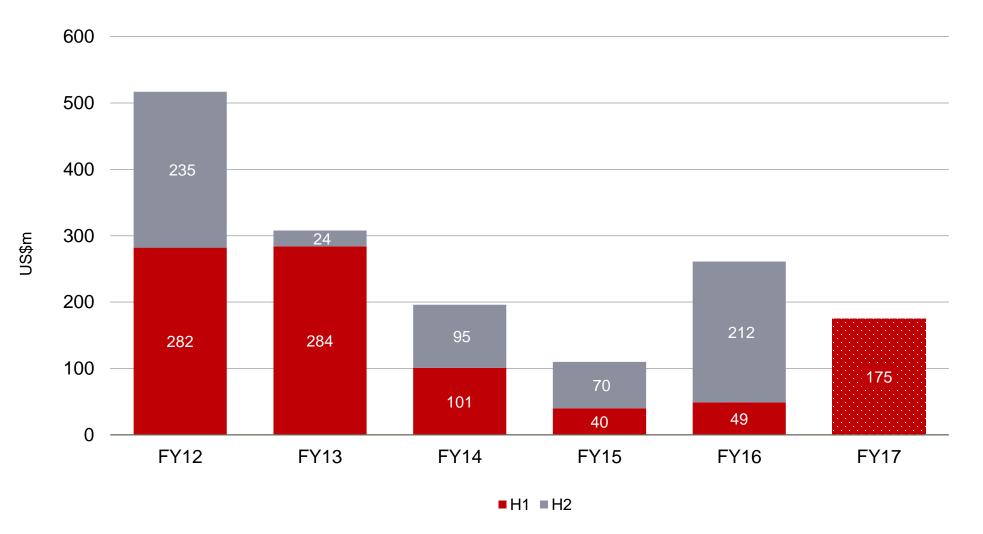
## SUSTAINABLE CASH FLOWS

SOLID OPERATIONAL CASH FLOW (US\$ million)



<sup>1</sup> Hidden Valley excludes the amount received from Newcrest Mining Limited and a total of US\$22 million re-investment capital towards stages 5 and 6 <sup>2</sup> Dumps exclude capital expenditure of US\$7 million relating to the Central Plant reclamation project

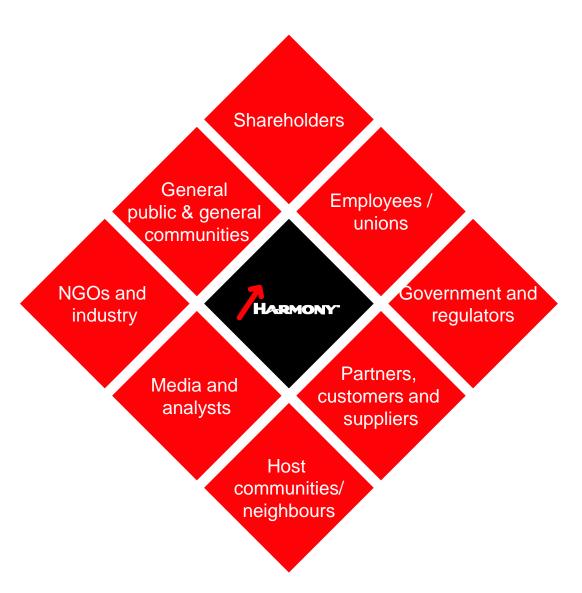
EBITDA\* (US\$)

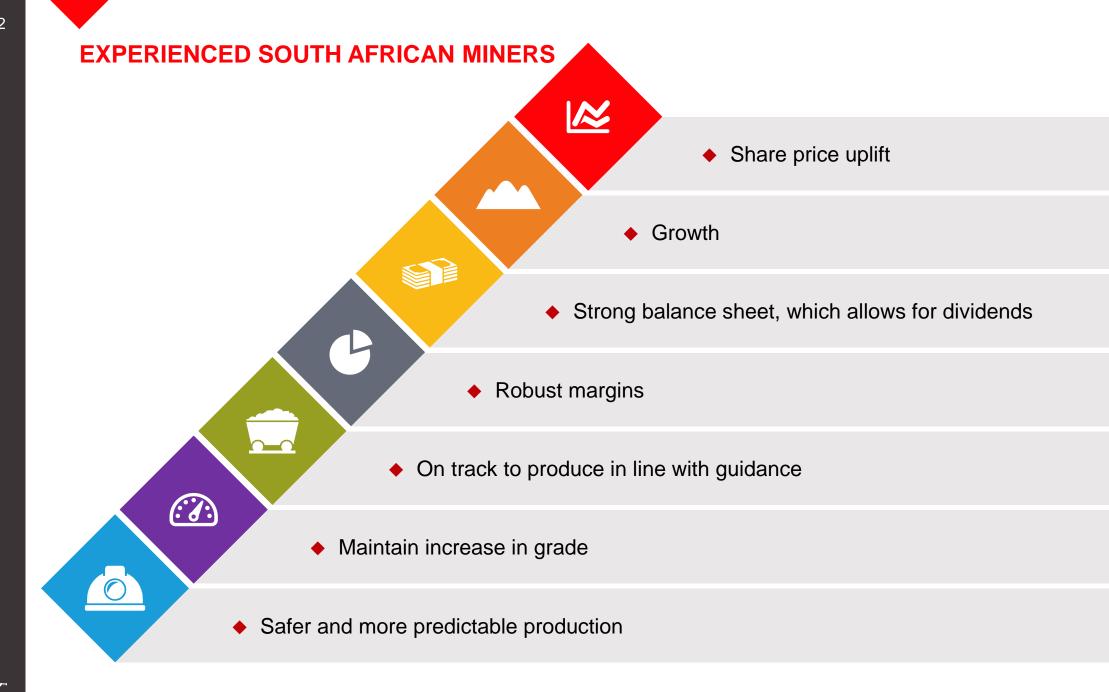


EBITDA: excludes impairment and loss on scrapping of property, plant and equipment



#### **DE-RISKING THE COMPANY THROUGH HEALTHY RELATIONSHIPS**







# PRIVATE SECURITIES LITIGATION REFORM ACT SAFE HARBOUR STATEMENT

This presentation contains forward-looking statements within the meaning of the safe harbor provided by Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended, with respect to our financial condition, results of operations, business strategies, operating efficiencies, competitive positions, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters. These include all statements other than statements of historical fact, including, without limitation, any statements preceded by, followed by, or that include the words "targets", "believes", "expects", "aims", "intends", "will", "may", "anticipates", "would", "should", "could", "estimates", "forecast", "predict", "continue" or similar expressions or the negative thereof.

These forward-looking statements, including, among others, those relating to our future business prospects, revenues and income, wherever they may occur in this report and the exhibits to this report, are essentially estimates reflecting the best judgment of our senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, these forward-looking statements should be considered in light of various important factors, including those set forth in this presentation. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation: overall economic and business conditions in South Africa, Papua New Guinea, Australia and elsewhere, estimates of future earnings, and the sensitivity of earnings to the gold and other metals prices, estimates of future gold and other metals production and sales, estimates of future cash flows, and the sensitivity of cash flows to the gold and other metals prices, statements regarding future debt repayments, estimates of future exploration results and the replacement of reserves, the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions, fluctuations in the market price of gold, the occurrence of hazards associated with underground and surface gold mining, the occurrence of prices of production imports, availability, terms and deployment of capital, changes in government regulation, particularly mining rights and environmental regulation, fluctuations in exchange rates, the adequacy of the Group's insurance coverage and socio-economic or political instability in South Africa and Papua New Guinea and other countries in which we operate.

For a more detailed discussion of such risks and other factors (such as availability of credit or other sources of financing), see the Company's latest Integrated Annual Report and 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 presentation or to reflect the occurrence of unanticipated events, except as required by law.

