

# The gold mining industry has played a significant role in South Africa for over 100 years, and continues to play a valuable role today.

But, this is an industry that is mature, and, in the absence of major new discoveries, or innovative means to reach and mine its deep and more marginal reserves, gold production in South Africa will continue to decline in the coming decades.

Nonetheless, this is an industry that continues to make an important contribution in the lives of employees, communities and the country, through taxes and royalties, by providing jobs and benefits, education and training and by investing in social projects and infrastructure. Thousands of employees are direct partners in gold companies, through companies' employee share ownership programmes and profit share schemes, while millions of South Africans' savings are held by pension funds invested in mining companies listed on on the Johannesburg Stock Exchange.

While the gold industry continues to contribute significantly to the South African economy and its people, the industry continues to face significant challenges which include:

- A volatile gold price and rand-dollar exchange rate which affect longterm planning, investment and production.
- Continually rising input costs including the cost of electricity, wages, water and materials, which have had a significant impact on the industry's cash flow margins.
- Operational challenges such as increasing depth of operations, ageing infrastructure, greater distances to working areas, reduced flexibility and declining grades which have all contributed to a consistent decline in production and productivity.
- Policy and regulatory uncertainty which continued to negatively impact investment confidence and has increased the cost of capital.

In short, gold production continues to decline as costs continue to escalate. The gold industry is a price taker. This means that it does not have any control over the price of its product, which is set by the market and which is driven by both supply and demand, as well as sentiment. Cost increases, therefore, cannot be passed on to its buyers. As a result, around 75% of gold mines operating in South Africa today are unprofitable.











This precarious situation has been compounded by a lack of policy and regulatory certainty, which has concerned local and international investors, and has made it more difficult for companies to raise investment for both new and sustaining capital.

At the same time, gold industry stakeholders – employees, communities, investors, suppliers, government – are facing their own challenges and are seeking more from the industry:

• Employees want higher wages and improved benefits, as well as job security.

- Communities want more jobs to be created, and investment in infrastructure and social development programmes.
- The State requires compliance with existing, new and proposed legislation and regulations, which continue to add to the industry's cost base.
- Investors expect returns, both in share price appreciation and dividends.
- Suppliers are seeking higher rents for their products, as they too face inflationary cost increases.



Gold mining matters to South Africa and its people. In 2017, the gold mining industry:



Contributed
R42.7 billion\*
towards GDP

\* 2016 figures



Employed around **112,000** employees directly



Produced
138 tonnes
of gold



Paid employees
R29.9 billion
in earnings



Sold **R67.6 billion** of gold



Paid
R0.9 billion
in royalties

It is not only in mining communities that the gold mining industry makes a significant contribution. Because of its history, and the fact that so many employees are drawn from rural areas of South Africa and neighbouring countries, the industry made a significant contribution to so-called labour-sending communities across southern Africa.

Given the high levels of unemployment and poverty in South Africa and neighbouring countries, the contribution made by the industry's direct economic impacts are far greater than would be found in most parts of the word. It is estimated that every mining employee supports between five and 10 dependants and for every direct mining job created, a further two direct jobs are created in downstream and support industries. The consequence is that an industry that employ around 112,000 people directly, also creates around 340,000 direct and indirect jobs at and around its operations, and indirectly supports between 1.1 million and 3.4 million dependants.



#### **Gold contribution**

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Contribution to GDP (Rbn)	77.9	65.7	61.1	58.4	55.8	48.0	49.5	48.1	44.6	42.7	*
Contribution to GDP (%)	1.5	1.2	1.1	1	1	0.8	0.8	0.8	0.7	0.7	*
Production (t)	253	213	198	188	180	154	160	152	145	142	138
Sales (Rbn)	36.4	44.7	49.1	53.0	67.0	74.0	57.5	57.1	58.6	75.5	67.6
Number of employees	166,064	166,423	159,926	157,019	144,799	142,200	131,738	119,007	115,055	116,479	111,795
Employee earnings (Rbn)	14.5	16.0	17.4	19.9	20.8	22.2	23.9	23.4	24.6	28.7	29.9
Royalties (Rbn)	_	_	_	_	_	0.8	1.1	0.8	0.8	0.6	0.9

<sup>\* 2017</sup> figures not available yet

#### **WAGES AND BENEFITS**

Gold mining employees are among the most well-paid South African industrial workers. Not only are basic wages paid by the sector higher than those of comparably-skilled workers in other industries, but a number of additional benefits are included in the overall costs of employment (known as cost-to-company).

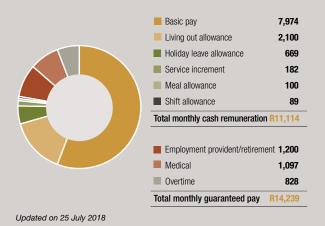
Basic wages and packages vary widely, depending on the level of skills, responsibility, years of service and accountability each individual employee brings to the job and the relative scarcity of available skills. Although basic wages may vary slightly from mine to mine, reflecting individual mines' ability to pay, many cash benefits are common across the entire industry.

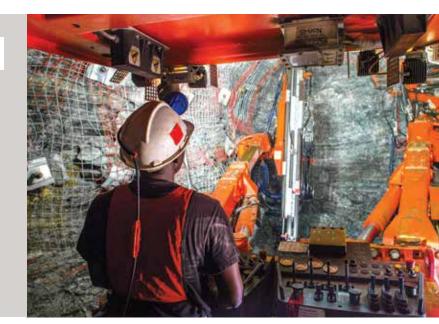
Since the latest wage increases were implemented in July 2017, the lowest paid entry-level underground gold mine worker has, on average, been receiving a cash remuneration of around R11,114 per month. This cash component includes living out allowances, service increment, meal allowances and a 13th cheque. The addition of fixed company contributions, such as medical aid and provident or retirement cover, raises the entry-level underground employee's guaranteed package to R14,239/month

As employees gain more skills and move up through the job categories towards higher basic wages, the fixed monthly payments become a smaller percentage of the employees' remuneration package.

There are also special payments for scarce skills, such as rock drill operators, that can vary from mine to mine. Skilled artisans can earn monthly pre-tax packages of over R30,000, before bonuses and overtime.

#### Monthly wages and benefits of an entry level underground employee as of 1 July 2017 (Rand)





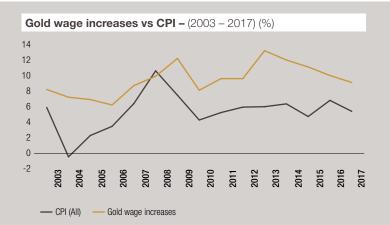


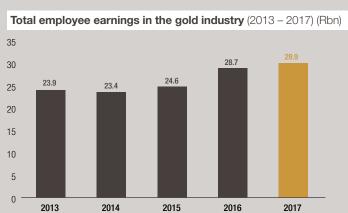






Over the past 10 years, increases in the wages in the gold sector have been four percentage points above rises in the consumer price index (CPI), a measure of inflation pressures, reflecting both the wage gains in this sector by employees and a narrowing in the gap between lower and higher income employees.

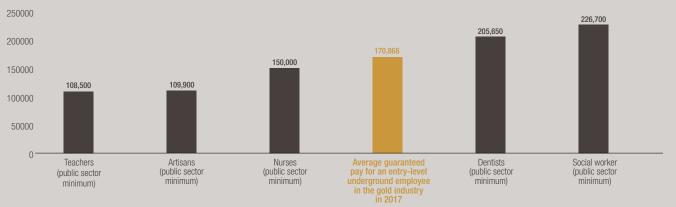




Source: Stats SA and Minerals Council South Africa

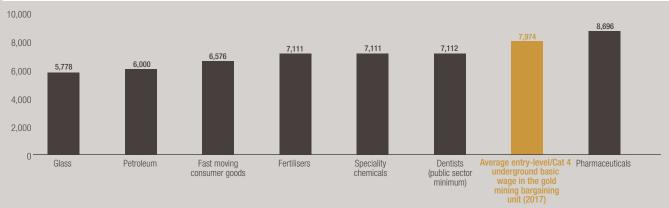
Source: Minerals Council South Africa

## Public sector vs entry-level underground employees – Annual wage comparison 2017 (Rand)



Source: Public Service Co-ordinating Bargaining Council, Gold Producers Updated on 25 July 2018

### Comparison – current basic entry-level wages across industries excluding benefits and bonuses (Rand)



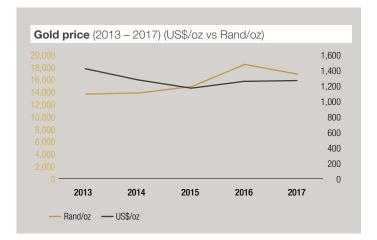
Source: National Bargaining Council for the Chemical Industry



#### **PRICE TAKERS**

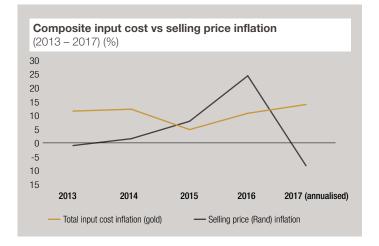
As price takers, the gold industry is compelled to accept the gold price set by the market. With no control over the price, the industry has to contain costs by being cost-effective and operating efficiently since it cannot pass rising costs on to end users.

The average gold price received between 2013 and 2017 was US\$1,269/oz, while the average gold price for 2017 was US\$1,257/oz.



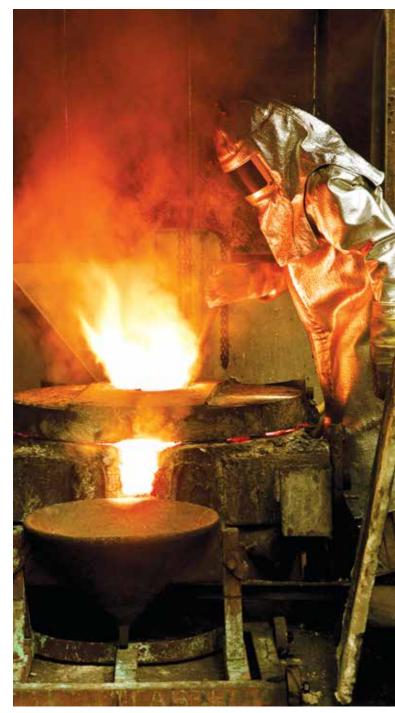
An ideal operating environment would be one where the increase in input costs has been contained to below or the same level as the gold price. Where input costs increase without a commensurate rise in the gold price, this results in an erosion of profitability.

Between 2013 and 2017, input costs for the industry increased, on average, by 10.4% while the selling price of gold only improved by 4.7% on average.



An additional challenge faced by the gold industry is the volatility of the gold price and the rand/dollar exchange rate. Because input costs in the gold industry are denominated in the domestic currency, the extreme volatility of the rand gold price has a significant impact on the industry's ability to plan ahead.

Between 1994 and 2017, the average rand/dollar exchange rate was R7.89/dollar while the standard deviation was R2.94. The standard deviation is a measure of volatility, indicating the extent to which a variable deviates from the average. Over this period, the average US dollar gold price was US\$758/oz, with a standard deviation of around US\$471/oz, while the average rand gold price was R6,747/oz with a standard deviation of around R5,649/oz. At 83%, the rand gold price volatility is significantly higher than the already high US dollar gold price volatility of 62%. This has a major impact on the industry's ability to plan over the long term, which adversely affects future investment and, ultimately, production.









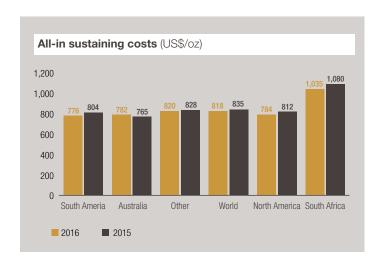


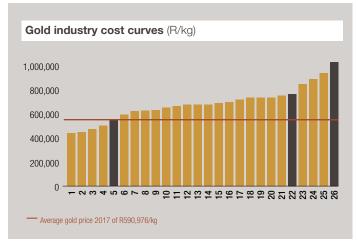
#### **INCREASING COSTS**

For a number of years, domestic input costs have continued to spiral at rates well above inflation. South Africa's gold mines are among the deepest in the world, some as deep as 4km underground, which significantly increases operating costs. The key drivers of costs for the gold industry are employee compensation (around 53%); and electricity (around 20%), the price of which has more than trebled over the past decade.

On average, South African mines are the most expensive to operate in the world with all-in sustaining costs averaging US\$1,035/oz compared to the global average of US\$818/oz. In 2017, around 75% of gold mines were unsustainable at the average gold price for the year of US\$1,257/oz or R590,976/kg.





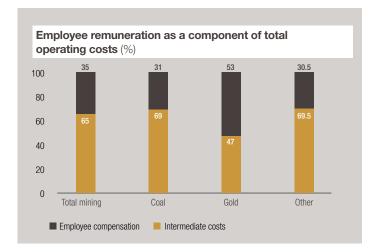




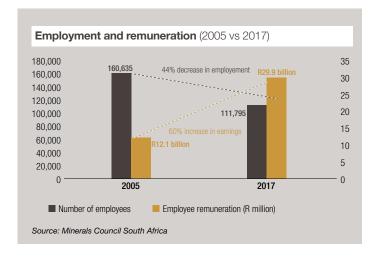


#### **EMPLOYEE COMPENSATION**

At around 53% of total operating costs, compensation to employees by far represents the largest component of input costs in the gold mining industry, far greater than any of the other mining sectors.



In 2017, the industry employed 111,795 employees who earned R29.9 billion in total. Between 2005 and 2017 the total number of employees in the gold industry declined by 48,840 (44%), while earnings increased by R18 billion (60%) over the same period.



A sustainable operating environment requires that labour cost increases are balanced out by labour productivity improvements. However, over more than two decades, labour costs have continued to increase at rates well above inflation, while labour productivity, measured by output per employee, continued to decline. Between 2006 and 2016, unit labour costs increased by 18% and labour productivity declined by 3%.

18%

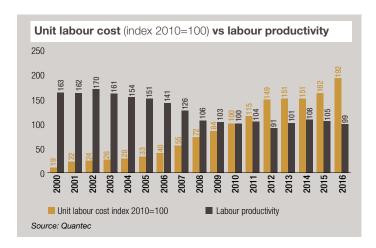
increase in unit labour costs.







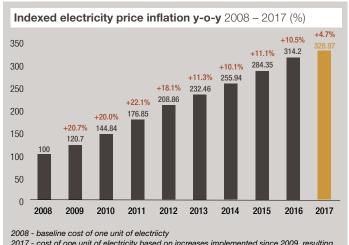




#### **COST OF ELECTRICITY**

The South African electricity crisis of 2008 prematurely and permanently down-scaled the gold sector. South African gold mines are mostly deep-level operations and require electricity for operating, as well as significant ventilation and cooling. The gold sector is one of South Africa's primary users of electricity. The mining industry as a whole takes up around 16% of Eskom's annual power supply, with the gold sector accounting for around 6.7% of this. Thus, any electricity cost increases have a substantial impact on the sector's viability. Importantly, by being a large user of electricity, and a consistent and early payer, the industry actually actively supports the financial wellbeing of Eskom, and helps ensure the supply of electricity to the country as a whole at current costs. If the gold mining industry did not exist, Eskom would not achieve its current sales volumes, and electricity prices across the country would have to rise.

That said, over the past decade, costs have consistently increased at double-digit percentage rates. Since 2009, the cost of electricity to the mining sector has more than trebled. In 2017, Eskom again applied to the National Energy Regulator of South Africa (NERSA) for a 19.9% tariff increase. While the regulator did not grant the increase in this instance, the consequences for the gold industry could have been catastrophic. At the time, the Minerals Council South Africa estimated that the increase would have resulted in a R3.21 billion cost increase, which would have rendered the operations of around 66% of all gold and platinum mines unsustainable and could have resulted in 48,000 additional job losses.



2017 - cost of one unit of electricity based on increases implemented since 2009, resulting

in an increase of 229% since 2008

#### **PRODUCTION**

For many decades, South Africa was the world's largest gold producer. For over a decade production has declined precipitously. By 2016, the country's market share had reduced to 4.4% of newlymined global supply, only ranking 7th among gold producing nations.

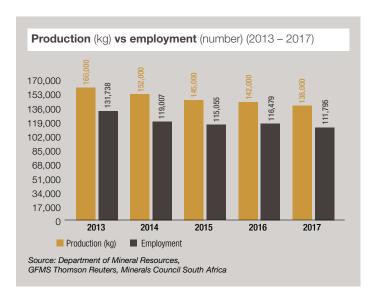
Since 2005, South African gold production has declined by 54% due to a number of reasons including increasing depth of mining, less working time at the face due to greater distances from shaft infrastructure, declining grades, rising costs and stoppages.

Between 2013 and 2017 gold production declined by 14% while employment decreased by 15% at the same time.

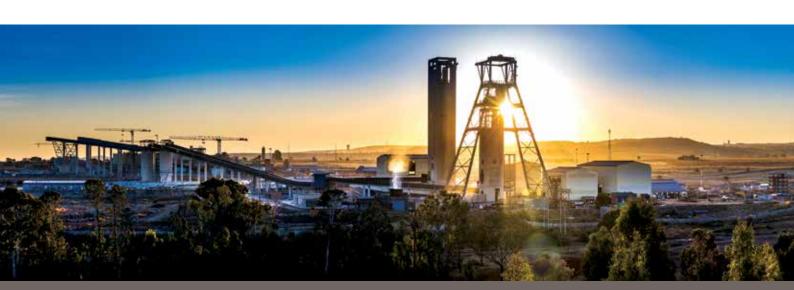
# THIS IS OUR INDUSTRY

South Africa depends on the gold mining industry for its contribution to the economy, jobs, training and development, infrastructure and social development. But, it is an industry in decline. New ways of doing things need to be found and all stakeholders need to work together to ensure our industry's future.

A structural shift is needed as well as significant modernisation and a sustainable, uninterrupted operating environment. All resources - human, physical and financial - need to be optimally applied in the industry. Continued decline of the sector can be avoided if industry stakeholders work together to reconcile short-term gains of the various parties with medium-term competitiveness and long term sustainability.



This is Gold is an industry initiative started by South African gold producers to provide insight into the gold industry, its processes and its contribution. We aim to provide honest, balanced information that can be used to understand the history of gold mining in South Africa, the work being done by the industry now and the plans in place for the industry's future.



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