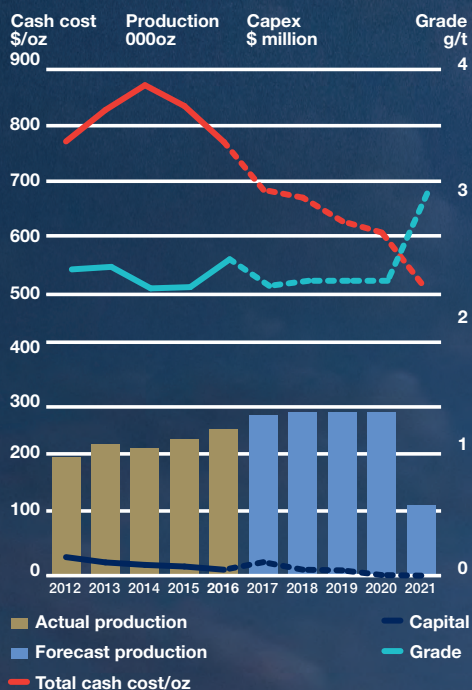
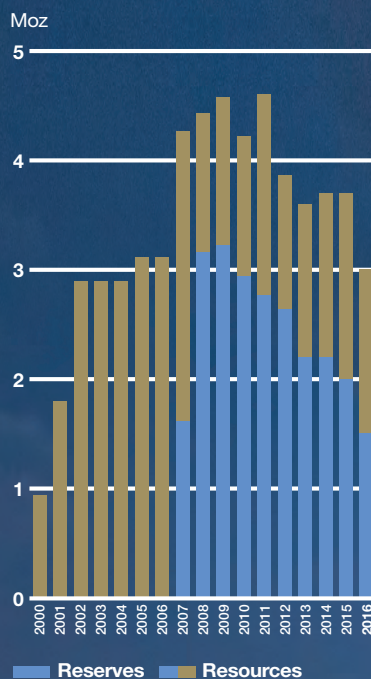


# TONGON GOLD MINE

## TONGON PRODUCTION AND FIVE YEAR FORECAST



## TONGON TOTAL MINERAL RESOURCES AND ORE RESERVES<sup>1</sup>



<sup>1</sup> Refer to the notes to the annual resources and reserves declaration on page 103 of this annual report.

<sup>2</sup> Refer to explanation of non-GAAP measures provided on page F-40 of this annual report.

The Tongon gold mine is located within the Nielle mining permit, 628 kilometres north of the Côte d'Ivoire port city of Abidjan and 55 kilometres south of the border with Mali. The Tongon gold mine and associated mining permit is owned by Société des Mines de Tongon SA (Tongon), in which Randgold has an 89.7% interest, the State of Côte d'Ivoire 10% and 0.3% is held by a local company.

PRODUCED

**260 556** oz

↑ **7%**

TOTAL CASH COST<sup>2</sup>

**\$771**/oz

↓ **8%**

PROFIT FROM MINING ACTIVITY<sup>2</sup>

**\$121.8** million

↑ **62%**

TOTAL RESERVES

**1.5** Moz

**\$1.1** million

DIRECT CONTRIBUTION TO  
COMMUNITY DEVELOPMENT

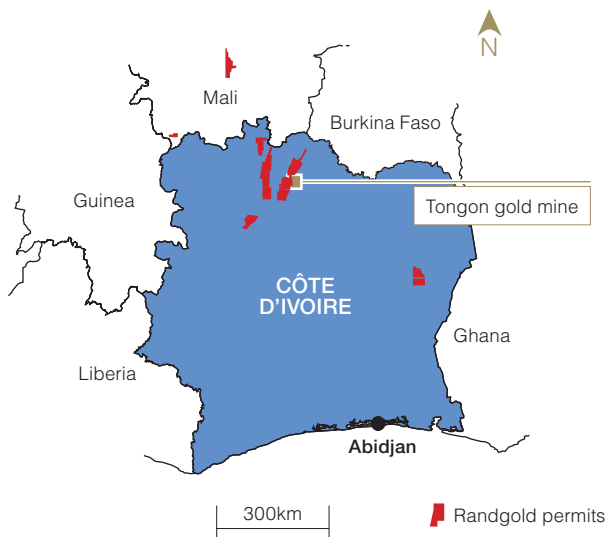
MALARIA INCIDENCE RATE

↓ **21%**

**LTIFR ↓ 74%**

# ACHIEVED IN 2016

- 7% increase in gold production to 260 556oz
- 8% reduction in total cash costs to \$771/oz
- 1% increase in gold recovery to 83.7% year on year and 84.7% in Q4
- 9% increase in feed grade to 2.5g/t
- Completed and commissioned 4<sup>th</sup> stage crushing circuit and relocated dewatering circuit
- OHSAS 18001 and ISO 14001 certifications maintained
- Malaria incident rate decreased by 21% year on year
- LTIFR down 74% year on year
- Paid first dividend to shareholders
- Continued localisation of workforce to over 97% Ivorian
- Continued investment in the development of educational programmes, community health and agricultural projects, designed to provide post mining employment
- Focused on the installation and start-up of revenue generation community projects



# TARGETED FOR 2017

- Produce 285 000koz of gold
- Continued reduction of the total cash cost/oz of production
- Optimise the full crushing circuit
- Optimise the rougher flotation operation to improve recovery
- Install a 4<sup>th</sup> flotation rougher cell to increase recovery
- Upgrade the oxygen plant capacity by 20 tonnes
- Rebuild the tertiary crushers by installing new top and bottom shell components
- Complete the power supply Busbar reconfiguration and capacitor installation to improve power supply stability
- Maintain OHSAS 18001 and ISO 14001 certification
- Maintain and improve community relations, communication and social development
- Continue with the localisation of workforce and upgrading of skills base

## TONGON KEY RESULTS

12 months ended 31 December	2016	2015
<b>Mining</b>		
Tonnes mined (000)	27 547	28 826
Ore tonnes mined (000)	4 195	3 563
<b>Milling</b>		
Tonnes processed (000)	3 853	4 018
Head grade milled (g/t)	2.5	2.3
Recovery (%)	83.7	82.6
Ounces produced	260 556	242 948
Ounces sold	255 942	241 478
Average price received (\$/oz)	1 247	1 148
Cash operating costs <sup>1</sup> (\$/oz)	734	801
Total cash costs <sup>1</sup> (\$/oz)	771	836
Gold on hand at period end <sup>2</sup> (\$000)	7 070	1 576
Profit from mining activity <sup>1</sup> (\$000)	121 847	75 444
Gold sales <sup>1</sup> (\$000)	319 249	277 253

Randgold owns 89.7% of Tongon, having acquired an additional 0.7% interest during the year, with the State of Côte d'Ivoire and outside shareholders owning 10% and 0.3% respectively. Randgold consolidates 100% of Tongon and shows the non-controlling interest separately.

<sup>1</sup> Refer to explanation of non-GAAP measures provided on page F-40 of this annual report.

<sup>2</sup> Gold on hand represents gold in doré at the mine multiplied by the prevailing spot gold price at the end of the period.

## MINERAL RESOURCES AND ORE RESERVES

Both Tongon Southern Zone (SZ) and Northern Zone (NZ) resource models and open pit designs have been updated, using a significant quantity of new data from grade control, advanced grade control and resource drilling.

This has resulted in changes to the mineral resources in NZ open pit where areas of projected mineralisation were found to be cut by late barren intrusives. This also led to a reduction in reserves within the updated pit design. Drilling continues on both the NZ and SZ to test the orebodies below the current pit design for possible extensions.

Resource drilling defined an additional 44koz of open pit mineral resources at Sekala and follow-up geotechnical studies are underway to complete the pit design for reserve definition.

Further resource drilling is underway to define mineral resources and reserves on several other satellite targets not currently included in mineral resources.

## TONGON MINERAL RESOURCES AND ORE RESERVES

at 31 December	Category	Tonnes (Mt)		Grade (g/t)		Gold (Moz)		Attributable gold <sup>3</sup> (Moz)	
		2016	2015	2016	2015	2016	2015	2016	2015
<b>MINERAL RESOURCES<sup>1</sup></b>									
Stockpiles	Measured	2.4	2.4	1.4	1.3	0.1	0.1	0.1	0.09
Open pits	Measured	5.6	6.4	2.8	3.3	0.5	0.7	0.5	0.6
	Indicated	15	22	2.6	2.6	1.3	1.8	1.1	1.6
	Inferred	5.6	5.7	2.5	2.6	0.5	0.5	0.4	0.4
Underground	Indicated								
	Inferred	6.9	6.4	2.9	2.9	0.7	0.6	0.6	0.5
TOTAL MINERAL RESOURCES	Measured and indicated	23	30	2.5	2.6	1.9	2.6	1.7	2.3
	Inferred	13	12	2.8	2.8	1.1	1.1	1.0	1.0
<b>ORE RESERVES<sup>2</sup></b>									
Stockpiles	Proved	2.4	2.4	1.4	1.3	0.1	0.1	0.1	0.1
Open pits	Proved	5.0	5.8	2.6	2.7	0.4	0.5	0.4	0.4
	Probable	12	18	2.5	2.4	0.9	1.4	0.8	1.3
TOTAL ORE RESERVES	Proved and probable	19	26	2.4	2.4	1.5	2.0	1.3	1.8

<sup>1</sup> Open pit mineral resources are the insitu mineral resources falling within the \$1 500/oz pit shell reported at a 0.6g/t cut-off. Underground mineral resources are those insitu mineral resources below the NZ, \$1 500/oz pit shell reported at a 2.0g/t cut-off. Mineral resources were generated by Mamadou Ly, an officer of the company under the supervision of Simon Bottoms, an officer of the company and competent person.

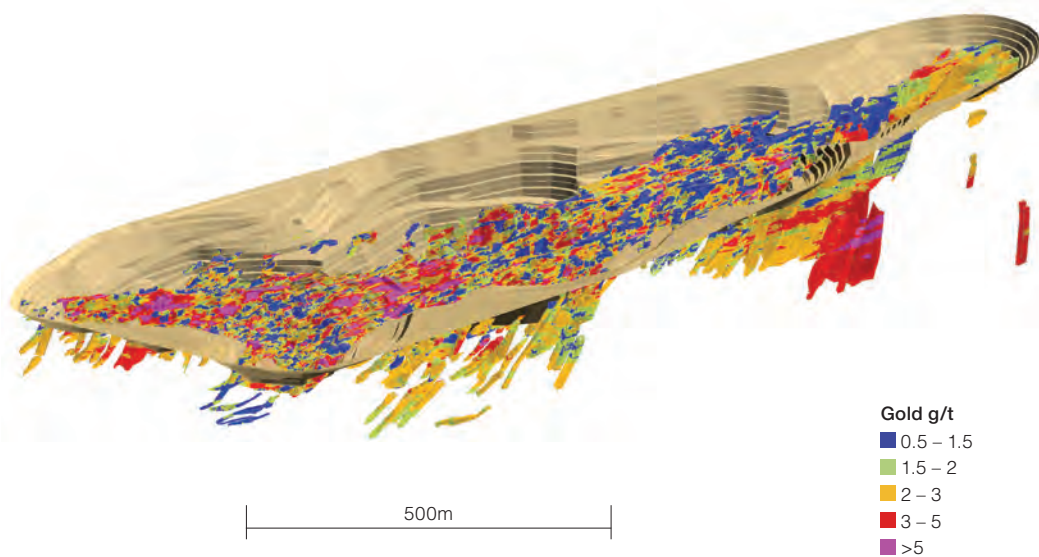
<sup>2</sup> Open pit ore reserves are reported at a gold price of \$1 000/oz and 0.8g/t cut-off and include dilution and ore loss factors. Open pit ore reserves were calculated by Shaun Gillespie, an officer of the company and competent person.

<sup>3</sup> Attributable gold (Moz) refers to the quantity attributed to Randgold based on its 89.7% interest in Tongon SA.

Mineral resource and ore reserve numbers are reported as per JORC 2012 and as such reported to the second significant digit. All mineral resource tabulations are reported inclusive of that material which is then modified to form ore reserves. Refer to the notes to the annual resources and reserves declaration on page 103 of this annual report.

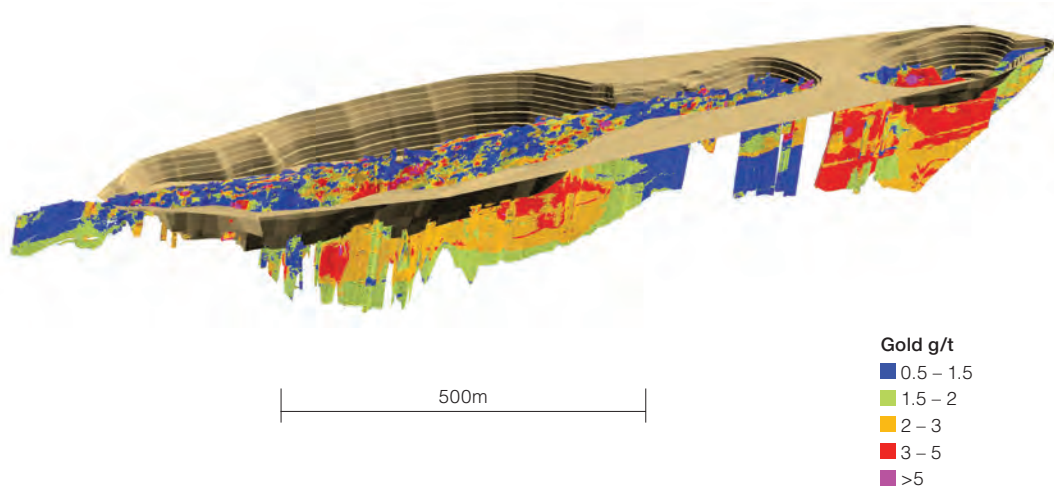
TONGON SOUTHERN ZONE

Block model with \$1 000/oz pit design



TONGON NORTHERN ZONE

Block model with \$1 000/oz pit design



## OPERATIONS

Mining at Tongon began in April 2010 with gold production starting in December 2010. The Tongon mine comprises two open pit operations, the SZ and NZ and, with current reserves, has a five year LoM.

The mine produced 260 556oz of gold in 2016, a 7% increase year on year, as a result of a 9% improvement in head grade and a 1% improvement in recovery. Mill throughput decreased by 4% mainly as a result of one mill being offline for 46 days to repair and refurbish the mill journal (lubricated bearing sets which support the mill shell). The quaternary CH440 Hydrocone crushing circuit, designed to improve overall mill throughput, was installed and commissioned in Q2. Soon afterwards, the associated dewatering circuit was relocated to facilitate ease of operation and efficiency. Both circuits were successfully commissioned in Q2.

By Q3 2016, optimisation of the total crushing plant, inclusive of the primary, tertiary, secondary and quaternary circuits, continued with the supplier. Mechanical inefficiencies detected in the tertiary crushers necessitated their change-out with new units. Despite this, the mine continued to improve on the crusher throughput and product size closer to the designed parameters. Extensive training, improvement of operator skills, and localisation of the workforce continued in 2016.

Grid electricity issues, with frequent power outages and voltage drops, followed the same trends in Q2 and Q3 as in 2015, necessitating the use of a higher proportion of diesel generated power at a higher cost than originally planned. However, the grid-to-generated power ratio improved to 89:11 for the year compared to 79:21 in the prior year.

Gold sales increased year on year to \$319.2 million at a total cash cost of \$771/oz, resulting in a profit from mining activities, before interest, tax and depreciation, of \$121.8 million. Capital expenditure for the year totalled \$10.5 million of which \$4.9 million was spent in Q4 on six new 3512B CAT generators, installed and commissioned in order to increase the mine's total generated capacity to 24MW. The remaining capital was towards the installation of the new quaternary crushing circuit, grid power plant upgrades and TSF Phase II extension.

During the year, Tongon paid a total of \$21.3 million in dividends to its shareholders.

## MINING AND PRODUCTION

Both the SZ and NZ pits were mined in the review period. SZ mining was mainly the pushback of the eastern and southern walls to supply fresh sulphide ore to the plant. The eastern pushback was completed in Q4. In the NZ pit, mining focused on oxide waste stripping during Q1, Q2 and Q3 which allowed oxide ore mining in Q4 for plant feed.

As in 2016, mining activities for 2017 will focus equally on both the NZ and SZ pits, mining both ore and waste.

The LoM schedule is summarised as follows:

- Mining in the SZ pit started in 2010 and will continue to 2020, with the oxide pit extension of SZ planned to be mined from 2019.
- Mining in the NZ pit started in 2011 and will continue to 2020; mining of the NZ satellite pit has been included in the mine plan and is scheduled to start in 2019.

Total material mined in 2016 of 27.5Mt was in line with the annual target. Total ore mined at 4 195kt was 18% above the previous year. The strip ratio for the year at 5.6 was 21% below the prior year, but in line with the LoM plan.

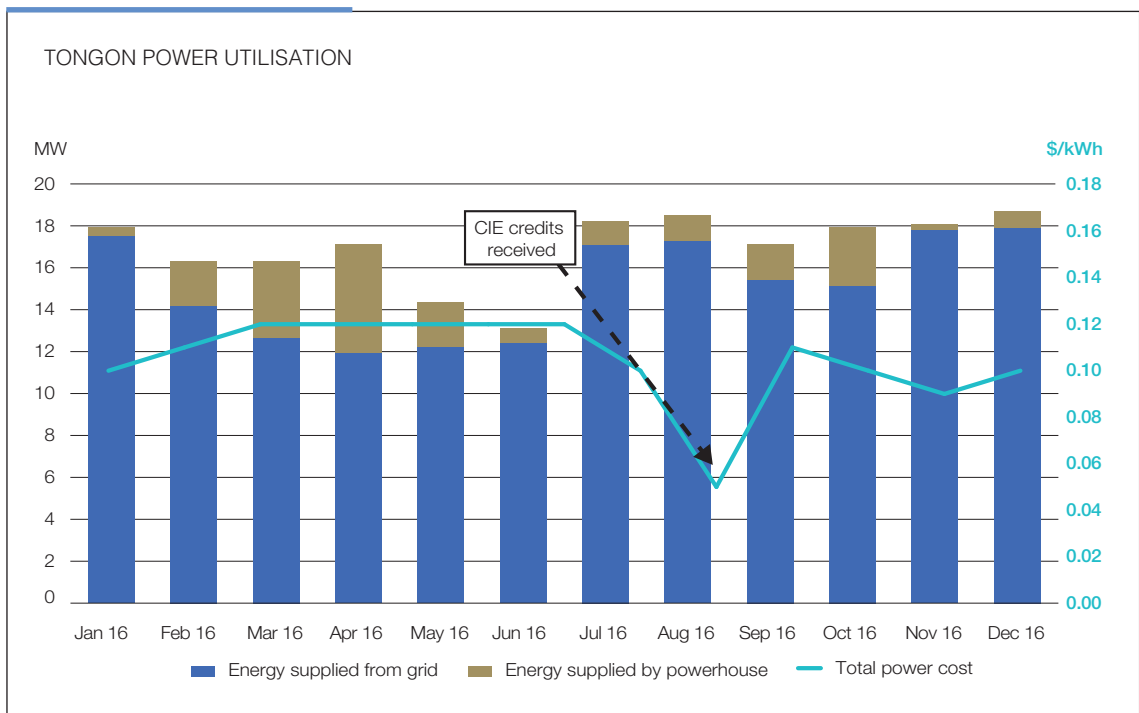
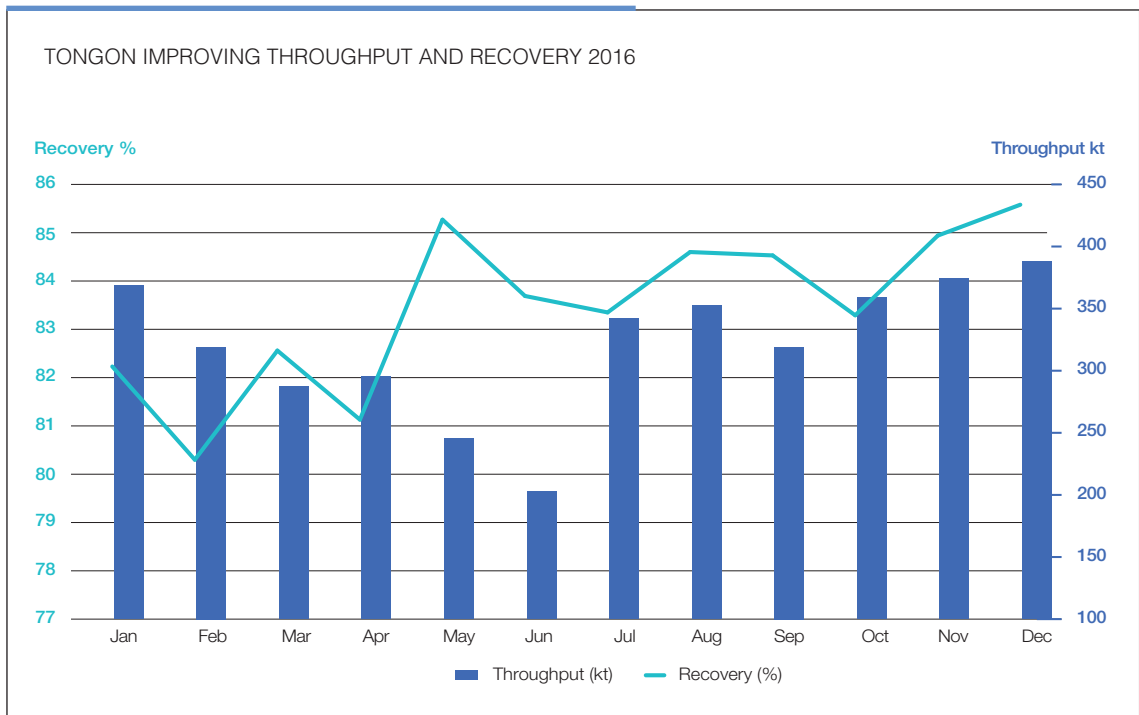
Dewatering remains an integral part of Tongon's mining strategy as the pits lie in the catchment area of an old river system and are downstream of the water storage dam. Mining schedules and plans are developed with a view to ensuring two low spots (sumps) in the pit at any one time and ahead of the mining cycle, to allow mining to take place in dry ground while the water is pumped away from the sumps. The SZ pit 260RL stage, installed in Q4 2014, continued to serve as the main pumping station during 2016. The rainy season preparation and action plan for 2017 is already in place. In both the pits, borehole pumps are permanently pumping on the perimeter of the pit. Sumps and trenches around the pit and waste dump are in place to capture surface water for ex-pit dewatering.

## PROCESSING, PLANT AND ENGINEERING

### Processing

Ore tonnes treated in 2016 at 3 853kt was 4% below the previous year's performance, following the impact of the mill No2 slipper pad and journal mechanical breakdown in the second quarter, which required major repairs and refurbishing over a 46 day period.

The second phase of the quaternary crusher installation took place in Q1 with commissioning in Q2. This, together with the relocation of the dewatering screen, improved crusher throughput and product size but was still below the designed 740tph at a product size  $P_{80}$  of 9.5mm. By year end a throughput rate of 620tph and product size  $P_{80}$  of 10.6mm was achieved. The total crushing circuit, from the primary to quaternary crushing circuits, is being optimised with the supplier. This includes a review of the mechanical integrity of all crusher units. Mechanical deficiencies were identified in the tertiary crushers, rendering them unable to operate at peak performance. Identical new replacement sub-frame, top and bottom shell components have been sourced, and are expected to be delivered and installed in Q1. These replacement tertiary crusher components should increase the integrity of the units and enable them to operate at the levels of power and pressure necessary to achieve the required product tonnage and fineness.



The milling circuit performance was reviewed in 2016 and several initiatives were identified to improve mill throughput:

- Upgrade of the mill motor from 7MW to 8MW (complete for one mill);
- Upgrade of both mill cyclone clusters (complete);
- Change to a lower profile mill liner (Q1 2017);
- Reduction of the sizes for the mill trunnion feed opening (complete); and
- Conversion of one mill to a grate discharge configuration (Q2 2017).

Following this, the mill power will be raised from 6.3MW to 7.0MW. This action of raising the mill power on the mills coupled with improving the crushing plant performance, is expected to ramp up mill tonnage throughput to 4.5Mtpa in 2017.

Year on year, gold recovery improved by 1% to 83.7% and by December 2016 had improved to almost 85%, mainly as a result of improving and sustaining the mass pull of both the flash and rougher flotation circuits, splitting the treatment of concentrates and rougher tails within the CIL circuit and sustaining the required dissolved oxygen and cyanide levels in the CIL circuit. Gold production increased 7% year on year to 260 556oz, partially as a result of the higher grade ore feed. Further recovery gains are anticipated with the addition of a fourth rougher flotation cell, through optimisation of the flotation circuits to recover all the arsenopyrite associated gold and the upgrade of the oxygen plant with an additional 20t capacity to satisfy leach dissolved oxygen requirements. This should enable the attainment of an 86% recovery which is in line with the original feasibility specification.

#### Engineering and power supply

Overall mill runtime for 2016 was 83.8%, a decrease of 7% compared to 2015, following the production hours lost for the repairs and refurbishment of mill No2 journal and replacement of the slipper pads. Subsequent to this, mill runtime improved significantly through the remainder of the year as further minor item deficiencies, such as the final tails pumps and valves, were addressed together with improved grid power supply and better power management.

Grid power to generated power ratio improved year on year from the 79:21 achieved in 2015 to 89:11 in 2016, although this remained below the targeted 97:3 ratio. Fewer grid power interruptions were experienced in the last quarter of 2016 mainly as a result of improved liaison with the national power utility, CIE, and improvement of the mine's total power supply facilities and their management. The major power events in 2016 were the overhaul of both 20MVA transformers at the substation, the replacement of the 11kV grid capacitors and the installation of six new 3512B CAT generators, which increased generating capacity to 24MW, sufficient to operate the total process plant should a total grid power outage occur.

The completion of the CIE's 225kV ring line passing from Leboa to Ferkessédougou is key to further grid power supply stability for the mine, and is expected to be completed by Q1 2018.

Power demand increased from 21.6MW to an average 23.18MW in 2016. Mine consumption increased in line with the raised operational availability and utilisation, and an increase in the number of process units demanding power as new equipment and projects were commissioned during the year. Following the improvement in the grid to generated power ratio, the cost of power decreased to \$0.11/kWh compared to \$0.12kWh in 2015.

#### EXPLORATION

The exploration team has continued to pursue the dual strategy of working to replace depletion at the mine with further drilling in and around the Tongon pits while continuing exploration to discover a new deposit on the Nielle permit, balancing a brownfields focus and intensive greenfields activities. Work included the completion of the diamond drilling at the NZ deposit to refine the interpretation of the granodiorite contacts and to define additional resources below the \$1 000/oz pit. Close to the Tongon mine, interpretation and modelling have culminated in pit optimisation and diamond drilling for resource conversion at the Seydou and Sekala satellites, while follow up work is being designed on the next satellite priorities. In the greenfields, infill soil continued to generate strong opportunities at Boundiali and Mankono where targets have been prioritised and surface follow-up, including intensive pitting and trenching, has started.

A detailed summary of the exploration work completed during the year can be found in the exploration section of this annual report.

#### HEALTH AND SAFETY

One LTI was recorded in 2016 resulting in a LTIFR of 0.21 per million hours worked compared to a LTIFR of 0.82 for 2015. As per our standard operating procedures, the LTI was fully investigated and corrective and preventative measures were put in place. In addition, the top five safety risks were identified and communicated within the mine as well as the 10 safety lifesaving rules derived from international best practice, all aimed at reducing the likelihood of mine incident occurrence.

The mine was recertified with OHSAS 18001 compliance for an additional three years after the completion of a successful audit in November 2016. Safety, was taken to the next level with 50 mine personnel, including the total Tongon management team, deputy heads of department and key senior personnel, being extensively trained in managing safety, equipping the team to effectively identify risks and improve their way of safely managing in the work areas. Risk assessments were reinforced as the key prerequisite at the start of every task on the mine.



Malaria management and control continued to improve year on year as reflected in the reduction of the incidence rate from 42% in 2015 to 33% in 2016. This improvement followed an intensive indoor residual spraying programme and increased door-to-door awareness campaigns in the surrounding communities and within the mine site. More than 2 000 long-lasting impregnated mosquito nets were distributed to workers and community members.

## ENVIRONMENT

Tongon mine maintained its ISO 14001 certification after a successful surveillance audit in November 2016. No major or significant environmental incidents occurred during the year.

The antipollution governmental authority (CIAPOL) released a full report closing off the December 2014 Class 1 environmental incident after the implementation of all corrective and preventative actions. The mine has engaged with the Comoe Park, a UNESCO listed site, to explore ways to contribute towards its conservation programme, as part of Tongon's biodiversity offset strategy, and visits have been scheduled for Q1 2017.

The mine continues to review its mine closure plan annually with assistance from international specialist consultants. The mine's focus in 2016 has been to partially rehabilitate available areas concurrently with mining operations rather than leaving this to the end of the mine's life. Further details are provided in the sustainability section of this annual report.

The management of arsenic within the mine and TSF has been the main environmental focus in 2016. A mine wide detailed arsenic distribution assessment was undertaken together with Digby Wells Environmental. Findings indicated that there are no current issues downstream of the process plant and the TSF catchment dams, situated within the mine perimeter. A monitoring system and a series of tests are being established to evaluate the long term behaviour of arsenic within the TSF and to review the measures in place to ensure stability thereof. Settling ponds and wetland systems within the mine are being developed to trap sediments and passively treat mine discharge water.

Further details on the environmental initiatives are provided in the sustainability section of this annual report.

## HUMAN RESOURCES AND INDUSTRIAL RELATIONS

Tongon's recruitment and localisation strategy is designed to minimise the influx of outsiders into the area and any disruption to community life, while maximising the benefits of the mine's operations for the communities surrounding the mine. The principle of employing locally first and spreading recruitment between local villages is fundamental to the mine's recruitment and localisation policy. This is evident in the percentage of Ivorians employed by the mine, which has increased to more than 97%. To date, 80% of the operational labour is from local villages. Overall, the operational labour complement for Tongon comprises 640 personnel, excluding people employed by contractors, while the total manpower is 1 736.



Open and continuous engagement between Tongon's workforce, the union and management ensured that a constructive work environment was maintained in 2016. In January 2017, the mine experienced an illegal sit-in which took place over a week, with employees demanding annual ex gratia payments, which ended after management, supported by the local and national authorities, negotiated a settlement with them.

As part of Tongon's succession plan, training workshops were held for 613 workers. These consisted mainly of engineering employees identified for promotion to higher levels of responsibility, and in some cases to replace expatriates.

Tongon manpower numbers increased, mainly due to the transfer of temporary appraised employees, such as samplers, geologists, shift metallurgists, mechanical engineers, fitters and boilermaker artisans, into permanent positions in the operation's departments, and partly due to recruitment of key skilled Ivorian personnel. This coincided with the decrease in the number of contractors and expatriates at the mine.

An In-Reach programme was started during the year as part of the overall Randgold strategy of reaching inwards to all mine employees and building a 'One Team, One Mission' mind-set and culture with all of the mine's employees. The In-Reach objective has been shared with all the mine employees and contractors, and action plans are being rolled out to ensure the success of this key initiative.

## COMMUNITY

The year ended with three minor grievances recorded, all of which were resolved, helping to maintain good relations with the community and local authorities.

Tongon continued investing in the development of educational, community health and agricultural projects, designed to provide post mining employment, in 2016. The mine focused on the installation and start-up of community approved revenue generation projects and on improving communication with the community via the chiefs, youth and local authorities. Projects included the building of an abattoir for Pougbe, cultivating 80ha of maize for Katonon and Kofiple, rehabilitating the Sekonkaha water dam and procuring tractors to support the agribusiness project started last year. In addition, the agribusiness project advanced with the construction of five additional henhouses for broilers and layers, two pigsties and the addition of five fish cages. The results for the year were 5 500 chicken broilers and 3 968kg of fish processed and sold and the rearing of 81 pigs. Nine tonnes of green peppers were also produced by one village alone.

The remaining community funding was mainly directed towards potable water projects and primary education, with the construction of twelve new classrooms including three nurseries, and primary health care projects including medical staff housing and the Mbengue surgical unit.

In partnership with the Yamoussoukro golf academy, the mine supported a golf development project for the promotion of the sport. This initiative will open the doors to this sport for talented Ivorian children, particularly from the poorer communities, while respecting equal opportunities for all, through the funding of scholarships for the best students.

Training was given to eight youths from Sekonkaha, Kationron, Katonon and Kofiple on maintaining the installed potable water systems. An agreement has been signed with the community villages, in the presence of the Prefect, for the management of these potable water systems. Management committees have been put in place in each village.

Further details of Tongon's sustainability initiatives are provided in the sustainability section of this annual report.

## TONGON MANPOWER

at 31 December	2016			2015		
	Expats	Nationals	Total	Expats	Nationals	Total
Employees	15	625	640	17	573	590
Contractors	29	1 067	1 096	30	1 147	1 177
<b>TOTAL</b>	<b>44</b>	<b>1 692</b>	<b>1 736</b>	<b>47</b>	<b>1 720</b>	<b>1 767</b>

## TONGON SAFETY (LTIFR)

