4 RESPONSIBLE ENVIRONMENTAL STEWARDS

ZERO MAJOR ENVIRONMENTAL INCIDENTS

3rd CONSECUTIVE YEAR

21% IMPROVEMENT IN WATER WITHDRAWAL EFFICIENCY

RESPONDED TO CDP WATER SURVEY FOR THE FIRST TIME

↑8%

IMPROVEMENT IN POWER EFFICIENCY

CLEAN ENERGY SHARE **35%**

+46 000 TREES PLANTED

209ha LAND REHABILITATED

MAJOR BIODIVERSITY OFFSET INITIATIVES WITH NATIONAL PARKS OF ALL HOST COUNTRIES

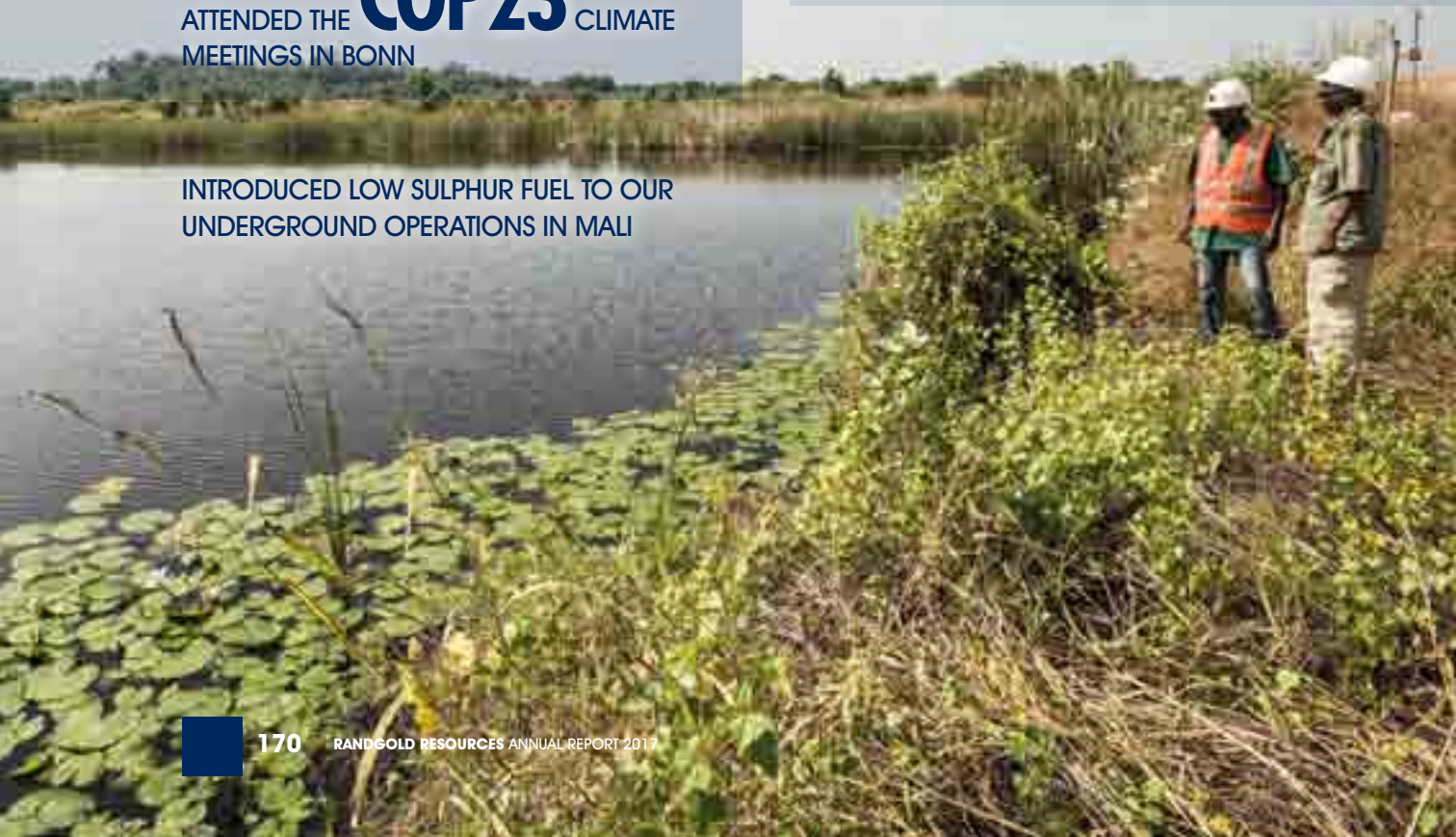
BEGAN TRANSITION OF ALL OPERATIONS TO

ISO 14001: 2015

WITH KIBALI SUCCESSFULLY CONFIRMED

ATTENDED THE **COP23** CLIMATE MEETINGS IN BONN

INTRODUCED LOW SULPHUR FUEL TO OUR UNDERGROUND OPERATIONS IN MALI



Responsible stewardship of the environment on which our business relies is a key priority for Randgold.

The process of extracting gold from the ground inevitably results in some damage to the environment and requires large amounts of energy and water. However, our policy is to mitigate all damage to the extent possibly by minimising our waste, water and energy use, and protecting the habitats and biodiversity that enable our mine and host communities to thrive.

Our approach to environmental management is to not only meet our baseline obligations under national laws and regulations but to proactively identify and address opportunities for continuous improvements in efficiency and management. This chapter outlines our approach with particular focus on:

- climate risk
- water risk
- biodiversity
- waste management (including hazardous waste)
- air quality.

Environmental management

Our consideration of a mine's environmental impact and how to manage it starts long before the mine gates open. During prefeasibility and feasibility stages of any project we conduct environmental and social impact assessments (ESIAs) to identify and understand the exact environmental impacts and risks of the project. Once a project moves to construction and ultimately operational phase, the ESIA is used to inform the development of a site specific environmental management system (EMS), which ensures all identified risks are managed in line with national regulations and international best practice standards such as the IFC Performance Standards. All our mine EMSs are audited against and certified to the ISO 14001 global best practice standard, and we are aligning all our operations' EMSs with the new ISO 14001:2015 standard.

To monitor our environmental performance and ensure we meet industry best practice, we have a number of key performance indicators. For example, we monitor the number of environmental incidents, which occur on our sites each year. Any environmental incident that occurs is classified on a 1-3 scale of severity (where one is the most serious), and we have a group target of zero class 1 incidents each year.

As indicated in the *number of environmental incidents table,* 2017 was the third consecutive year we had no major (Class 1) environmental incidents, and for the second year running we had just one moderate (Class 2) incident. The number of Class 3 incidents registered in 2017 increased 31% to 92 in 2017. However, we regard Class 3 incidents to be an early warning mechanism which, if properly attended to, can prevent more serious incidents from occurring. Therefore we do not see the increase in Class 3 incidents as reflective of a negative trend in performance as it also indicates an improvement in our proactive reporting of smaller incidents, which is a positive development.

NUMBER OF ENVIRONMENTAL INCIDENTS

at 31 December	Class 1 incidents			Class 2 incidents			Class 3 incidents		
	2017	2016	2015	**2017**	2016	2015	**2017**	2016	2015
Loulo	**0**	0	0	**1**	0	5	**24**	20	40
Gounkoto	**0**	0	0	**0**	0	0	**21**	17	9
Morila	**0**	0	0	**0**	0	0	**8**	8	0
Kibali	**0**	0	0	**0**	1	5	**24**	19	20
Tongon	**0**	0	0	**0**	0	1	**15**	6	16
Group	**0**	0	0	**1**	1	11	**92**	70	85

"By taking a long term strategic view of climate change, Randgold will be in a better position to identify risks, reduce costs and find opportunities from the global shift toward lower-carbon economies."

John Steele, capital projects executive

Managing climate risk

All our mines require a secure and steady supply of power to function properly. At the same time they are located in remote parts of the developing world, where access to the national grid is often unavailable, and this means that as much as 80% of the energy we use is self-generated – either through hydropower stations or diesel and heavy fuel oil burning thermal generators. Therefore maximising our energy efficiency and clean energy use is an important business driver.

Our policies

At a group level our energy policy has two key aims. The first is to ensure we meet the current energy needs of our operations. While the second compels us to ensure we use all energy as efficiently as possible. Each mine also has a site-specific energy plan, which takes into consideration the available infrastructure and resources, and sets out how the aims of the group level energy policy can be achieved.

Individual country contexts include:

- Tongon mine in Côte d'Ivoire is our only operation with access to a national grid system, with 91% of Tongon's total energy provided by the national grid. Therefore, Tongon's energy management plan prioritises improvements to enhance grid stability and energy efficiency to reduce overall energy draw and operating costs.
- Our Kibali mine in the DRC has no national grid access, but there are long rainy seasons and a number of rivers, and thus significant scope to deliver vast amounts of hydropower. Therefore the primary focus of Kibali's energy plan and strategy is to develop hydropower plants for use during the life of the mine and to hand over to local authorities for integration into the national power system upon mine closure. To date, we have built two run of the river hydrostations, Nzoro II and Ambarau, to service Kibali and have a third, Azambi, under construction. In line with our policy of local skills development and suppliers, the Azambi project is being built by Congolese contractors.
- In Mali the national grid does not extend as far as our mines and the country has a largely hot dry climate with a relatively short rainy season, with evapotranspiration rates that exceed annual rainfall levels. So, the primary source of power for our Malian mines, Loulo, Gounkoto and Morila, are diesel fired thermal generators, and the primary focus of the energy plans for our Malian operations is improved energy efficiency.

As part of our management of climate risk we also monitor our Greenhouse gas (GHG) emissions. The bulk of these emissions stem from our power generation activities, and our climate risk strategy is inextricably linked to our energy policy and plans. By improving energy efficiency and utilising clean energy sources wherever practicably possible we aim to reduce our overall emissions, decrease our emissions intensity and save significant operating costs.

Our ambition is to future-proof our business as the world transitions towards a low carbon economy and to align our business with the pathway set by the Paris Climate Agreement to keep the earth's temperature below a two degree rise.

We are fully transparent about our progress toward our emission intensity and reduction targets. We report our annual emissions to international bodies including CDP (formerly Carbon Disclosure Project) and also provide emissions and energy use data to shareholders via this sustainability report.

CASE STUDY

ENGAGING WITH CLIMATE CHANGE

Climate risk is an important consideration in our business, it is identified on our risk register, and we have plans and targets in place to minimise our exposure and future proof our business.

Between 2010 and 2015 we had a five-year target to reduce the emissions from our operations (Scope 1 and 2) by approximately 40% from a baseline of 40 CO_2-e/kt milled in 2010. Unfortunately due to the rapid growth of our business and the remote location of our operations we did not meet our target and emissions have since increased.

This year therefore, we have looked in detail at the underlying drivers of our carbon performance and worked towards setting new ambitious yet realistic emissions targets that also take into account the science-based requirements of keeping the global temperature rise below 2°C. For this reason we have worked with carbon footprint consultants Carbon Clear in 2017 to set new emission reduction targets for our operations and for our wider supply chain.

This process has resulted in an expectation that our total emissions (scope 1, 2 and 3) will peak in 2022, and we have set a total emissions intensity target of 72.92 CO_2-e/kt ore milled for 2022, dropping to 43.96 CO_2-e/kt milled by 2027.

An important part of achieving this target will be the integration of more clean energy sources in our energy mix. Opportunities we have identified to bring our carbon emissions under control include the potential for a 10MW and 5MW solar power at our Loulo and future Massawa mines by 2022 respectively, fully operational hydro plants at Kibali and connection with the West African grid project, led by the World Bank and other partners by 2030, which will draw a majority of energy from hydro and thermal sources.

Scope 3 emissions
Research by environmental non-profit CDP has shown that greenhouse gas emissions in supply chains are on average four times those of a company's direct operations. Randgold's work with Carbon Clear has also shown the importance of our supply chain. We found that over 40% of our total emissions are scope 3 (ie indirect emissions from suppliers). During 2018 therefore, we will work to better understand, measure and reduce our scope 3 emissions.

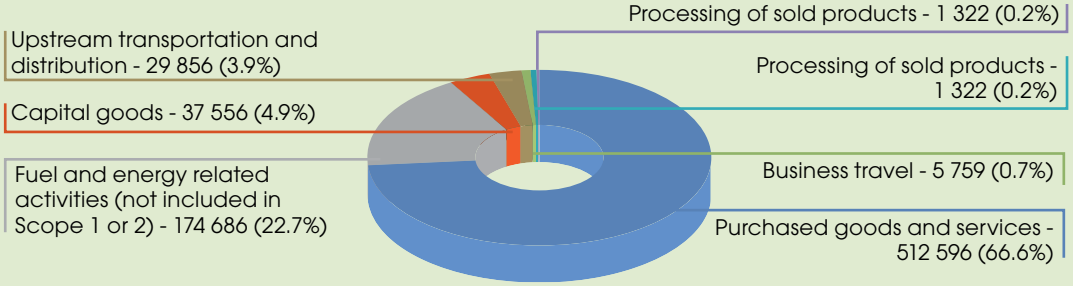
COP23 Attendance
At the invitation of the Malian government we attended the November COP23 in Bonn. This provided our representatives with an understanding of how climate change is being addressed on a global level. It also enabled them to make connections with a range of funders and innovators and get up to date with the latest innovations in green technology, and assess any new tools or ideas which may be transferable to Randgold's operations.

For example, they met with the International Renewable Energy Agency, regarding the West African Power Pole project, which is a project to assess the renewable energy capabilities of West African countries. Mali has 79.1TWh of solar energy potential. The project aims to improve the proportion of renewable energy available in West Africa from 22% of generated power to 52% in 2030.

In 2018 we will work with the Malian government and other Malian industry representatives to contribute to the development of Mali's Nationally Determined Contributions.

The figure below indicates the different categories contributing to our Scope 3 emissions.

SCOPE 3 EMISSIONS CATEGORIES



Our performance

We already see and feel the benefits of the transition to clean energy through the development of our hydropower stations at our Kibali mine. The construction of the Nzoro II power station in 2014 cost just over $90 million. When fully operational it saves us approximately $7 million in diesel costs per month, and its payback period was just under two years. We estimate similar payback periods for the Ambarau and Azambi hydropower stations in the DRC.

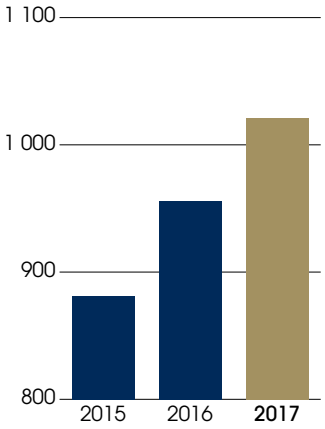
In 2017, 35% of our power was drawn from clean energy sources; a slight reduction on 2016. We attribute this to increased thermal usage at Tongon to stabilise the Ivorian national grid supply, which is largely drawn from hydropower generation. In 2017, the grid satisfied 91% of Tongon's energy needs, up from 89% in 2016, with diesel fired thermal generators used to meet the remainder. Other factors include lower than average rainfalls at Kibali during the wet season, reducing the water throughput at the hydropower plants and, in turn, the power generated.

In 2017, the DRC experienced lower than average rainfalls therefore hydropower met just over 50% of Kibali's electricity needs. However, with average rainfalls and once the new hydropower station, Azambi, comes on line later in 2018, we estimate hydropower will account for up to 80% of Kibali's electricity needs. We continue to monitor the viability of other forms of renewable energy. We currently have small solar power installations providing electricity to administration and some accommodation buildings and are investigating the possibility of adding solar power to Kibali's power mix during the dry season.

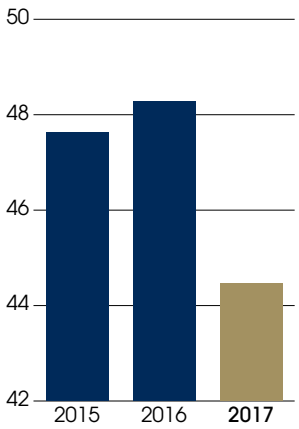
We are also investigating the possibility of incorporating solar power energy into the microgrid at the Loulo-Gounkoto complex and developing a solar power plant as part of the Massawa project.

As seen on the following graphs, our total energy use increased 7% to 1 021MWH in 2017, this is attributable to an increase in production in 2017. At the same time our energy efficiency in terms of electricity use improved by almost 8% to 44.47kWh/t of ore milled. Similarly our total emissions for 2017 increased 5.8% to 878kt CO_2-e and this is also attributable to increased production. While our emissions intensity in terms of CO_2-e/kt of ore milled improved 6.5% to 39.20 CO_2-e/kt ore milled.

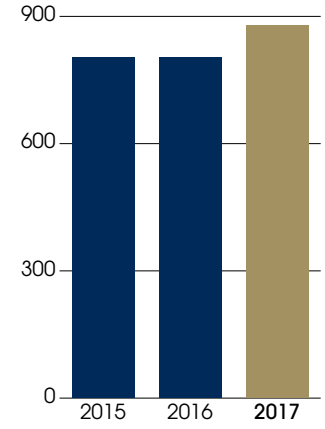
TOTAL ELECTRICITY USED (000MWh)



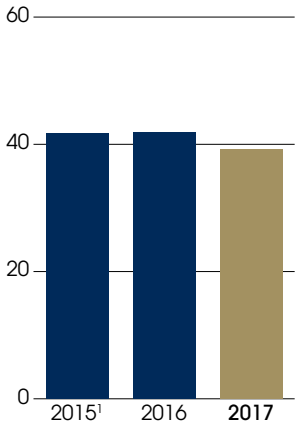
ENERGY EFFICIENCY (kWh/t MILLED)



TOTAL CO_2 EMMISIONS (kt)



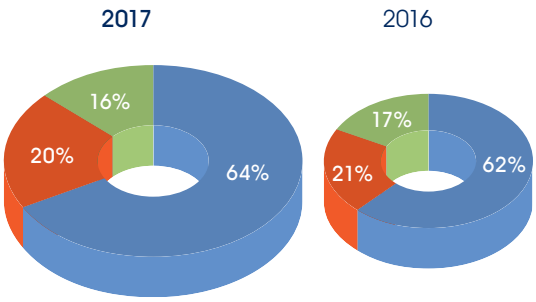
EMISSION INTENSITY (CO_2-e/kt)



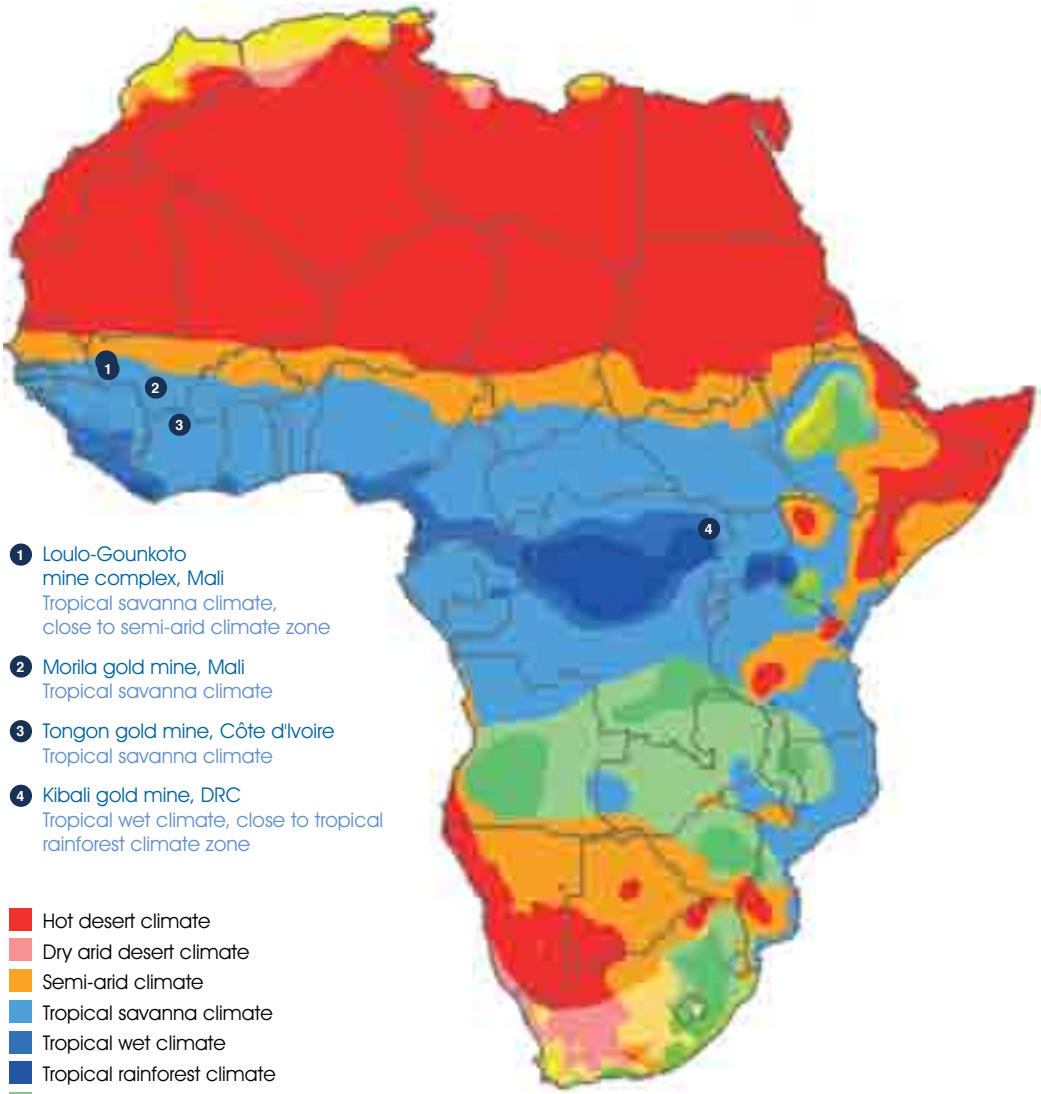
[1] *Restated. Refer to note 6 on page 114.*

GROUP LEVEL POWER MIX (%)

- Thermal
- Grid
- Hydro



OUR SITES BY CLIMATE ZONE



1. Loulo-Gounkoto mine complex, Mali
   Tropical savanna climate, close to semi-arid climate zone
2. Morila gold mine, Mali
   Tropical savanna climate
3. Tongon gold mine, Côte d'Ivoire
   Tropical savanna climate
4. Kibali gold mine, DRC
   Tropical wet climate, close to tropical rainforest climate zone

- Hot desert climate
- Dry arid desert climate
- Semi-arid climate
- Tropical savanna climate
- Tropical wet climate
- Tropical rainforest climate
- Humid mild subtropical climate
- Oceanic or highland climate
- Oceanic climate
- Hot summer mediterranean climate

Managing water risk

Water is a vital input for our business and our host communities. Therefore, our water stewardship is of critical importance to our business and our stakeholders. Our approach is to ensure both an adequate supply of water for our operations and to protect (or improve) the supply and quality of water for our local communities.

This approach is underpinned by a set of ambitious internal targets to ensure responsible water use. Our targets include:

- **Recycle** 75% of process water, by 2020.
- **Improve** water use efficiency to 1.4m^3/tonne of ore milled, with freshwater use in our processing plant to be below 0.5 m^3/tonnes milled.
- **Monitor and ensure** all water discharged by our operations is returned to source at the same or better quality, including zero uncontrolled discharges.

The water our mines abstract is drawn from a combination of surface water (rivers and dams), groundwater and water from mine dewatering. The amount of freshwater we can abstract is strictly limited by government issued permits, and we carefully monitor abstraction rates to ensure compliance with the permits. We take equal care with any water we discharge back into the environment, testing all water to be discharged for traces of 30 different chemicals prior to discharge.

Complementing the group's targets we have in place, each operational mine has its own tailored water management plan, which takes into account the different catchment users needs, the specific climate, surface and ground water availability and quality, evapotranspiration rates of the site as well as permit allowances and details how water is to be managed. Every mine is different. For example, the Loulo, Gounkoto, Morila and Tongon mines are located in a tropical savanna zone, which is prone to water stress, while Kibali is located in a tropical wet climate zone and enjoys a long rainy season.

Our performance

In 2017 we abstracted a total of 56.9 million litres of water, this represents a 20% increase on 2016 levels. We attribute this increase to three main factors. Firstly, the most significant increase on abstraction occurred at Morila, where the tailings reclamation project uses a series of high pressure water guns and large volumes of water to transform the TSF back into a slurry that can then be processed. Secondly, as we are now operating multiple pits at our Kibali mine, we are pumping more water from the pits. Finally, increases in overall production also required additional water to be abstracted.

Despite an increase in overall water used, we are encouraged by a 21% improvement in our water efficiency to 1.2m^3 water per tonne of ore milled, while freshwater efficiency improved to 0.5m^3, from 0.52m^3 in 2016. We are also pleased to report an increase in water recycling rates to 73% this year, up from 59% in 2016. These improvements can be attributed, in part, to the regular use of our new water management tool for each site. This tool provides us with comprehensive and constantly updated data on our water use from flowmeters at every point on site. The constant stream of data enabled us to use water more strategically and efficiently across our sites, which in turn drove up water recycling rates.

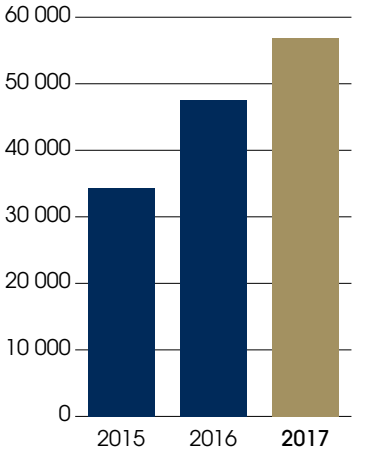
Unfortunately, our abstraction from rivers in areas vulnerable to water stress as a proportion of total abstraction increased significantly in 2017 to 65%. However, as shown on the following graph, river water accounts for 27% of our total water use, in these areas.

Water quality

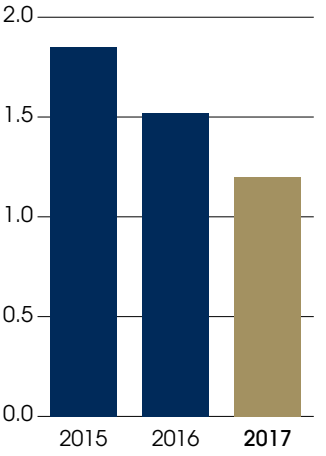
Alongside regular testing of discharge water, we also work with external consultants and national water laboratories to assess the groundwater quality and aquatic health of the rivers and streams around our operations. Water samples from both up and down stream of our operations are taken and assessed for major ions, heavy metals and bacteria. The health of aquatic fauna is also assessed. These assessments provide us with insight into the impact of our operations on local waterways, and results are also conveyed to local communities. For example, water sampling at Loulo-Gounkoto by the Malian national laboratory of water, found no significant increase in chemicals, however it did indicate significant faecal matter as a result of community housekeeping. We are now working in conjunction with the national laboratory to provide housekeeping advice to the communities to reduce bacteria levels in the water.

No incidences of non-conformity with national or IFC standards were recorded in 2017. During 2017, as an alternative to water treatment plants or chemical treatment plants, we constructed wetlands at our Loulo and Tongon mines to treat and reduce nitrate levels in the water discharged from the operations. A constructed wetland is a passive treatment system that is sustainable over the long term and incurs lower maintenance and operational costs post closure. Initial post construction monitoring indicates the wetlands are working well. For example, at Tongon monitoring of the water quality during the dry season shows an improvement in all parameters with dissolved concentrations of nitrate reduced by 54% on average, and arsenic by 69%. These are levels comfortably below the various water standards and limits set by both local authorities and IFC guidelines. We will continue to monitor the performance of the wetlands with a view to introducing them across all operations.

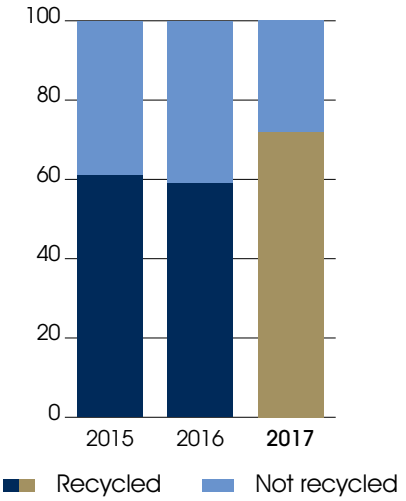
TOTAL WATER TAKE-OFF (Ml)



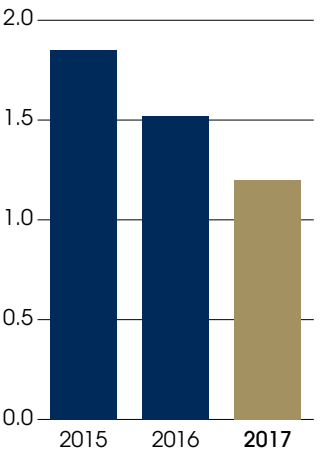
WATER USE EFFICIENCY (-M³/t)



TOTAL WATER RECYCLED (%)



WATER USE IN AREAS OF WATER STRESS



Managing biodiversity

Our policies

Regardless of how carefully we monitor and manage our environmental risks and impacts, there is no denying that mining processes will inevitably have some harmful effects on the flora, fauna and natural environment around our sites. We acknowledge this reality and are committed to minimising our negative impacts as far as possible and to rehabilitating our sites to the highest levels possible.

We have a dedicated and publicly available group biodiversity policy in place, the main goal of which is for zero net negative biodiversity impacts by the time each mine closes. The biodiversity policy also commits us not to conduct exploration or mining activities on any natural world heritage sites.

To achieve net zero negative biodiversity impacts we consider and document the full spectrum of flora and fauna at the feasibility stage of any project, working with biodiversity experts to conduct baseline surveys and make detailed records.

By the time a project becomes operational, a detailed and site-specific BAP is put in place. BAPs draw on the information from baseline surveys and ESIAs to detail the various habitats and fauna on site and set out plans to restore the site ecosystems to their original state or better wherever possible. Part of this includes a requirement for the development of onsite nurseries for the propagation of native trees, and provision for the accumulation and storage of topsoil needed for site restoration. We also consider biodiversity offsets to achieve our goal of net zero negative biodiversity impact.

Implementation of BAPs is regularly monitored and reported quarterly to the board-level E&S.

Once a mine is operational, we apply an impact mitigation hierarchy towards biodiversity risk management. The biodiversity mitigation hierarchy compels us to minimise biodiversity impacts through careful planning including building, pipeline and tailings placement, restore and rehabilitate impacts to the extent possible and offset any negative impacts in line with IUCN guidelines.

PROTECTING BIODIVERSITY THROUGHOUT THE MINE LIFE CYCLE

PROJECT STAGE	OBJECTIVES	ACTIONS
 **Exploration**	• Understand local biodiversity and provide guidance for site planning if project moves to operational stage.	• Initial biodiversity assessment – including desk and field research and input from experts.
 **New projects and expansion**	• Establish biodiversity baseline and clearly define biodiversity risks.	• Environmental and Social Impact Assessments. • Satellite images of site prior to construction.
 **Operational sites**	• Set out actions to avoid and mitigate damage to biodiversity and restoration and rehabilitation planning. • Offset unavoidable impacts.	• Development and implementation of site-specific Biodiversity action plans (BAPS). • Annual site satellite imaging. • Develop biodiversity-offset programmes.
 **Closure**	• Ensure site is restored and rehabilitated with no net loss of biodiversity.	• Replace flora and fauna based on satellite images taken prior to construction.

Our performance

During 2017, we put significant focus on reducing the overall foot prints of our operations and as shown in the *total land rehabilitated and distributed* table, we rehabilitated approximately 209 hectares of land. Over the year we planted more than 46 000 trees across all our mine sites.

We have also continued to develop and expand our exciting and innovative biodiversity offset and conservation programmes with the Garamba National Park in the DRC and the Mali Elephant project. These are explained in detail in the 'Partnerships for protection' case study.

TOTAL LAND REHABILITATED AND DISTRIBUTED

	2017	2016	2015
Total hectares rehabilitated	209	260	20
Total newly disturbed hectares	72	222	53

Waste management

In order to produce a few grams of gold, we must extract at least a tonne of rock from the ground, and the process of gold mining generates a large amount of waste, primarily in the form of waste rock or overburden. Other wastes generated by the gold mining process include chemical reagents such as cyanide, as well as waste oils from vehicles and machinery and domestic waste from the administration buildings, catering services and onsite accommodation.

Our policies

Each mine has its own site-specific waste management plans which set out how, organic, inorganic and hazardous wastes should be handled, stored, separated, recycled or disposed to ensure all waste is responsibly disposed of. Our waste rock management procedures meet the requirements of all national laws and regulations and IFC performance standards. For example, geotechnical engineers are responsible for ensuring waste rock dumps are carefully designed and constructed to ensure stability.

PARTNERSHIPS FOR PROTECTION

In 2017 we continued to develop and expand our exciting and innovative biodiversity offset programmes in our host countries. These include:

Democratic Republic of Congo
We have a long-standing and successful partnership with the Garamba National Park in the DRC, one of the world's oldest national parks and a UNESCO world heritage site. Garamba is home to the largest population of elephants and the only surviving population of the critically endangered Kordofan giraffe in the country. It was also the last known home of the now extinct Northern White Rhino. Since 2014, we have provided more than $1 million in support for projects to protect wildlife in the park including:

- $240 000 for elephant tracking collars and anti-poaching flights
- $250 000 to fund a Kordofan giraffe monitoring team
- $250 000 for the construction of bridges and infrastructure within the park to improve ranger access and emergency response rates, and to help kick-start tourism.

Mali
In 2016 we entered a partnership with the Mali Elephant project, an NGO to help protect an endangered desert elephant population in the Gourma region of Northern Mali. Our funding helps support community eco-guardians to prevent poaching and provide alternative livelihoods for local communities. In 2017, the Mali Elephant project was one of the recipients of the United Nations Development Programme's Equator Prize, which recognises innovative solutions for tackling poverty, environment and climate challenges.

Senegal
We are planning to undertake a detailed baseline assessment of the 9 000km2 Niokolo Koba in Senegal during 2018. This will help UNESCO and the Senegalese government to better understand the biodiversity characteristics of this World Heritage site.

Hazardous wastes, including cyanide

Hazardous chemicals, including cyanide, are a crucial input for mining processes. Poor handling and management of these components could have dangerous or even fatal consequences for workers and could cause long term damage to the environment. Thus it is no surprise that cyanide management consistently ranks as one of the highest priority issues for both our internal and external stakeholders.

We have an internal cyanide code that governs the transportation, storage and use of cyanide at all our operations and our supply chain. This code meets all the requirements of our host country legislation and is aligned with international best practice standards, including the International Cyanide Code which we require all relevant suppliers to be certified to. We also provide regular specialised training and supervision in cyanide handling for employees and contractors who handle, transport or dispose of cyanide.

We also conduct annual audits against the cyanide code, including testing water for cyanide traces and tracking all environmental and health incidents linked to cyanide. No breaches of the cyanide code were recorded in 2017. As far as practicably possible, we also substitute hazardous chemicals with less harmful alternatives and we use careful inventory management to ensure products are not wasted through expiration.

Other hazardous wastes linked to our operations include batteries, fluorescent lights, waste oils, solvents, laboratory and assay wastes and some electronic waste. Overall however, the amount of hazardous waste we generate is relatively small and as far as practicably possible is all recycled or disposed of in accordance with host country legislation or industry best practice, whichever is the more stringent. In line with the Basel Convention, we do not transport, export, import, treat or internationally ship any hazardous wastes.

Non-hazardous waste

Waste rock and tailings from operations are our most significant source of waste by volume. In line with IFC standards all our waste rock and overburden is deposited in carefully designed waste rock dumps. Our waste rock dumps are managed by a team of geotechnical engineers who ensure all slopes are shaped to the correct angle for maximum stability. As part of our commitment to continuous land rehabilitation, dumps are covered with soil and planted with trees and grasses, helping to control erosion and reduce dust on site.

All tailings are sent to our Tailings Storage Facilities (TSFs). We have clear policies to ensure the construction operation, maintenance, monitoring and closure of our TSFs meets international industry best practice. All our TSFs have been designed to securely hold tailings even under severe stress situations. All our TSFs are managed by tailing specialists Fraser Alexander. Each TSF is subject to daily inspection for signs of stress or damage, and is audited on a quarterly basis by independent auditors, Epoch Resources. Our Morila tailings dam is now being reclaimed and reprocessed as part of the mine closure.

Other wastes we produce include general and organic wastes from administration buildings, kitchens and onsite accommodation, as well as scrap metal, wood and used tyres. Wherever possible we aim to reuse or recycle any waste product we generate before sending to landfill.

MAIN TAILINGS FACILITIES BY MINE

Tailings facilities by mine	Size and establishment	Specifications
Loulo-Gounkoto	Main TSF: 160ha 2005	Earth starter wall and self-raise by ring dyke paddocks. Decant system comprises a floating barge
Kibali	CTSF 1: 65ha 2013 CTSF 2: 45ha 2016 FTSF: 123ha 2013	Earthwall impoundments/spigot discharge. FTSF decant system comprises a buried penstock pipeline and return water dam. CTSF 1 &2 decant system comprises a floating barge
Tongon	Main TSF: 200ha 2010	Earth starter wall and self-raise by ring dyke paddocks. Decant system comprises a buried penstock pipeline, return water and storm water dam
Morila	Main TSF: 334ha 2010-2015	Earth starter wall and self-raise by cyclone deposition. TSF reclamation to inpit deposition started in April 2015. TSF reclamation managed by Paragon Tailings. Inpit deposition managed by Morila.

CASE STUDY

DK GIE CLEANS UP VILLAGE

DK GIE is a cooperative company founded and managed by seven young entrepreneurs from DK village near our Loulo mine in Mali.

It was established in 2014, as part of our local economic development work aimed at both improving quality of life for residents and creating alternative (non-mining) jobs in the region. The company provides a range of skills and services including grass cutting, tree planting, water spraying, waste collection and disposal, and fence construction and repair to the mine and local community.

Sougolo Sissoko from DK GIE explains, "We started out providing waste collection for our village, and parts of the mine. Now we do so much more, we help with housekeeping on the mine, we helped plant the wetland at Loulo, we help to build and repair fences. The mine helped us to get started in the beginning. They provided some equipment to help with rubbish collection, bins and a donkey cart. Now we still have the donkey cart, but we also have a Hilux vehicle and just bought a water truck. They continue to help us. They arranged some entrepreneurship training for us, and we learned to invoice and quote and how to use computers."

It isn't just the seven managers from DK GIE who benefit from the company's success. They also employ and train local people to help with the jobs they get, and keep a percentage of their profits to help with village improvements.

Modibo Keita from DK GIE explains, "Depending on the contract, we might employ 25 people from our community to help with the job and just like we were trained, we teach our workers. It is good to be able to provide jobs for our people. We also keep some of the money we make to help our village. We know the mine won't always be here so we need to be able to look after ourselves."

DK GIE members with their new water truck.

TONNES OF WASTE MANAGED

Tonnes	2017	2016	2015
Tailings	22 394 091	16 407 312	18 497 138
Waste rock	83 576 004	82 620 763	64 382 913
Hazardous	7 931	6 589	7 294
General	10 536	9 569	11 379
Waste recycled	10 116	10 358	12 400
Waste to landfill	2 868	3 566	2 439

Our performance

As shown in the table above the volume of general waste we produced increased by 10% to 10 536 tonnes in 2017. All waste is responsibly disposed of and we sent 10 000 tonnes of waste for recycling in 2017.

The disposal and recycling of waste products can also provide opportunities for local economic development and wherever possible we work with local youth associations such as DK GIE (see case study on page 182) to create sustainable and profitable waste management and collection companies. We also sell used grease, air filters, steel drums and conveyor belts to local artisans for reuse.

Our periodic water analyses indicate although we are within acceptable arsenic levels with our discharges, there is a relatively high levels of arsenic in solution on our tailings dam. We recognize this to have the potential of being a long term post closure risk so a series of testwork is now being undertaken to verify the long-term stability of the arsenic complex being precipitated with the tailings dams to further mitigate any closure risk.

Air quality

Dust and air quality is an ongoing issue for many mining companies, and many parts of the mining process create dust, including vehicle movement, crushing, blasting and waste rock dumps. High levels of airborne dust can cause problems for workers and local communities and their livestock, including breathing issues and eye irritations. If not carefully managed, significant amounts of airborne dust can contribute to occupational health issues and has the potential to harm our social license to operate.

We follow IFC guidelines to monitor and manage air quality on and near our sites. On site and community monitoring is done via a network of dust monitoring stations and controls points. Monitoring stations are checked weekly to assess airborne particulate counts. In accordance with IFC guidelines, we aim to ensure airborne particulate levels are less than 500mg/m^2/day. Data from monitoring stations is reported to the relevant authorities, and also helps to inform and prioritise our dust suppression activities.

One of our biggest sources of dust is vehicles moving on and around the mine and minimising the dust picked up by vehicles is one of the most important ways we can ensure air quality on site and in the community. For example, we regularly spray the haul roads and other high use roads with molasses, which acts as a dust suppressant. We also have a number of water trucks that spray roads with water to suppress dust. A number of these water trucks are now community owned and operated which helps to ensure a prompt response to dust in the community.

Elsewhere on site we have fitted water sprayers to conveyor belts to minimise dust generation throughout production. These efforts are further complemented with dust reduction activities, including planting of vegetation in exposed areas and on waste dumps and by running speed awareness courses in the community to limit dust pick up generated by vehicles.

This year we have also tried to use our positive relationship with the Malian government to encourage the adoption of low sulphur fuels across the country's mining industry. This has been shown to significantly reduce harmful diesel particulate matter in mining. We have started using low sulphur fuel at our underground operation in Mali.

APPENDIX 1: MATERIALITY ASSESSMENT 2017, PROVIDING THE FRAMEWORK FOR 2018

Throughout December 2017, Randgold undertook its annual materiality assessment process to update and build on the 2016 materiality assessment. The results of the process will be used to inform our sustainability work for the year ahead and we wanted to include a snapshot of it here.

Our process

Our materiality assessment involves surveying external and internal stakeholders with a long list of 42 sustainability issues potentially linked to operations. We asked internal stakeholders to score each issue on a 1 to 5 scale, based on the potential severity of impact on our business. We also asked a group of over 100 external stakeholders to identify the 14 issues (or top third) most important to them. Stakeholders are also given the opportunity to identify any additional issues important to them.

The results will be reviewed and agreed internally by Randgold management to ensure they provided balanced coverage of the company's most material issues wherever they occur in the value chain.

Prioritisation

In order to draw a threshold for our reporting, we set boundaries to identify high and medium impact issues. We define high impact issues as those that appear in both internal and external stakeholders' top 14 most important issues, while medium impact issues are defined as those appearing in the top third (14) of either internal or external stakeholder lists. Where not included in the materiality results, we also include any high priority global issues, such as climate change and water scarcity in our reporting.

Our emerging findings

The results of the 2017 update show that 25% of highest priority issues from 2016 remain in this category (with cyanide management, closure and water pollution dropping in priority), but there was also some notable movement around which issues both internal and external stakeholders placed in their top third of priorities. In total this year there were seven issues recorded as highest priority, and 12 as medium priority.

High priority issues

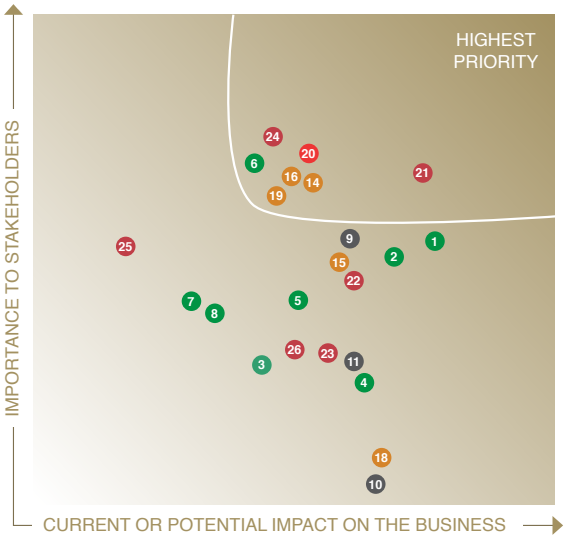
- Safety
- Malaria
- Waste management
- Community development and investment
- Local economic development
- Local and national employment
- Local procurement and partnership

Medium priority issues

- Stakeholder engagement
- Closure planning
- Cyanide management
- Water pollution
- HIV
- Staff training
- Land Disturbance
- Biodiversity
- Air pollution
- Fair wages
- Occupational health
- Grievance resolution

Detailed analysis of the results will be provided in next year's sustainability report.

2017 MATERIALITY ASSESSMENT



ENVIRONMENT

1. Cyanide management
2. Water pollution
3. Water efficiency
4. Environmental incidents
5. Air pollution
6. Waste management
7. Land disturbance
8. Ecology/biodiversity

GOVERNANCE

9. Stakeholder engagement
10. Legal compliance
11. Community grievance resolution
12. Anti-corruption measures
13. Corporate governance

COMMUNITY

14. Local and national employment
15. Closure planning
16. Community development
17. Indigenous peoples
18. Artisanal mining
19. Local procurement and supply

PEOPLE

20. Local economic development
21. Safety
22. Skills transfer and training
23. Occupational health
24. Malaria
25. HIV/AIDs
26. Fair wages

The issues listed in the key are the 26 issues identified as material issues either in 2016 or 2017. The following issues were not considered to be priority issues in the 2017 materiality process: anti-corruption measure, corporate governance, indigenous peoples and are not included in this scattergraph.

APPENDIX 2: MATERIALITY ASSESSMENT PURPOSE AND METHODOLOGY

Randgold's materiality assessment process (see earlier chapter on `governance of sustainability') serves three distinct purposes; it helps us prioritise sustainability reporting topics, informs our risk management and strategic planning and helps us engage with stakeholders to understand their concerns and requirements.

We use the Global Reporting Initiative's (GRI) definition of materiality in the context of a sustainability report which is information that, `Reflects the organisation's significant economic, environmental, and social impacts or substantively influence the assessments and decisions of stakeholders'.

All materiality assessments are conducted in line with guidance set out by the GRI Standards guidelines and helped shape this report to be: In Accordance – Core with the GRI Standards.

Methodology

Each year we undertake a formal materiality analysis with internal and external stakeholders. The process includes:

- **Identification phase** – Our sustainability team, working with the support of external consultants, drafted a long list of 42 potential sustainability issues that could be deemed material to our business both inside and outside the boundaries of our mines. These issues were selected from those listed in the GRI Standards as well as the metals and mining supplement, based on our own experience and a review of extractives sustainability issues in the media over the last year. Internal stakeholders are asked to score the potential impact to Randgold's business of each of these issues. While external stakeholders were asked to identify the 14 sustainability issues most important to them.
- **Prioritisation phase** – The long list survey was sent to internal and external stakeholders including a representative sample from each of our eight stakeholder groups.
- **Validation phase** – We aggregate and provide contextual analysis of results, which is reviewed by Randgold senior management to ensure it provides balanced coverage of the company's most material issues wherever they occur in the value chain.
- **Identifying our priority issues** – In order to draw a threshold for our reporting, we set boundaries to identify our highest priority and medium priority issues. We define highest priority issues as internal and external stakeholders top three issues and the issues that appear in both internal and external stakeholders' top 14 most important issues. Medium priority issues are defined as those appearing in the top third of either internal or external stakeholder lists.