"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.

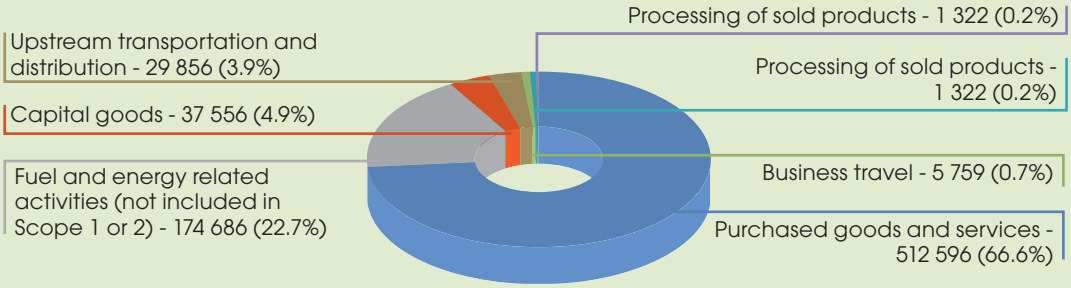
COP23 Attendance
At the invitation of the Malian government we attended the November COP23 in Bonn. This provided our representatives with an understanding of how climate change is being addressed on a global level. It also enabled them to make connections with a range of funders and innovators and get 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.

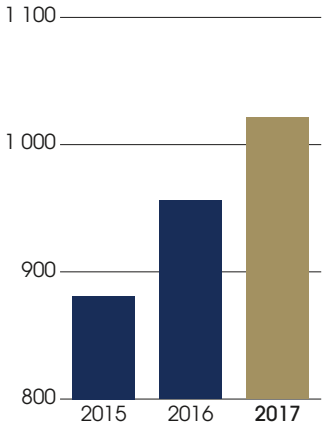
In 2017, 35% of our power was drawn from clean energy sources; a slight reduction on 2016. We attribute this to increased thermal usage at Tongon to stabilise the Ivorian national grid supply, which is largely drawn from hydropower generation. In 2017, the grid satisfied 91% of Tongon's energy needs, 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.

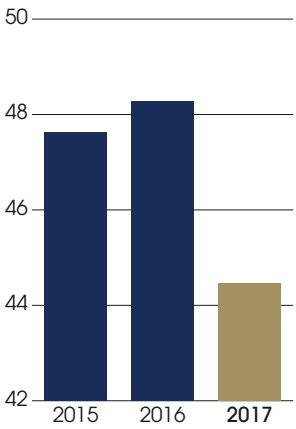
We are also investigating the possibility of incorporating solar power energy into the microgrid at the Loulo-Gounkoto complex and developing a solar power plant as part of the Massawa project.

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.

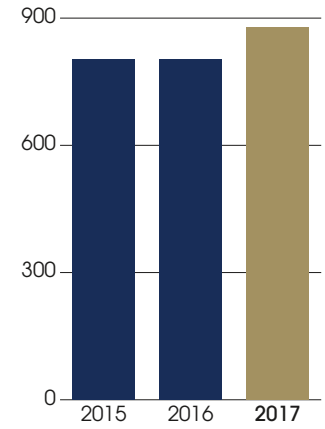
TOTAL ELECTRICITY USED (000MWh)



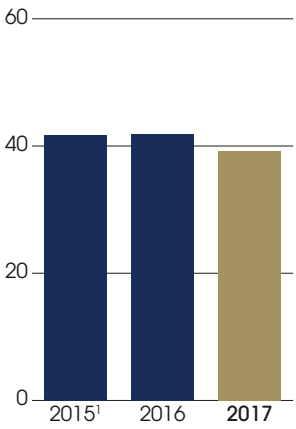
ENERGY EFFICIENCY (kWh/t MILLED)



TOTAL CO_2 EMMISIONS (kt)



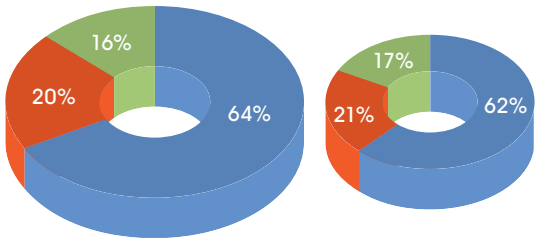
EMISSION INTENSITY (CO_2-e/kt)



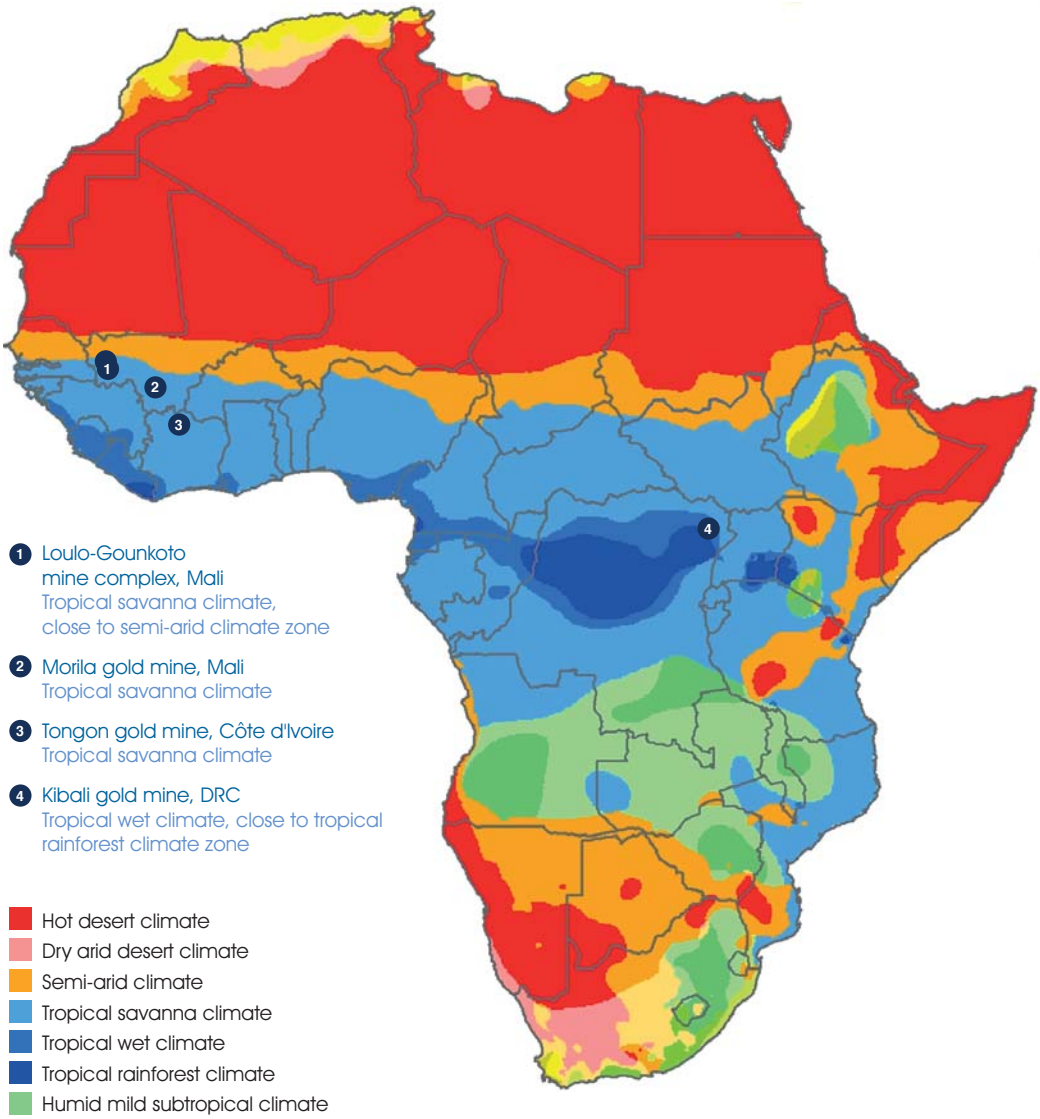
[1] *Restated. Refer to note 6 on page 114.*

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