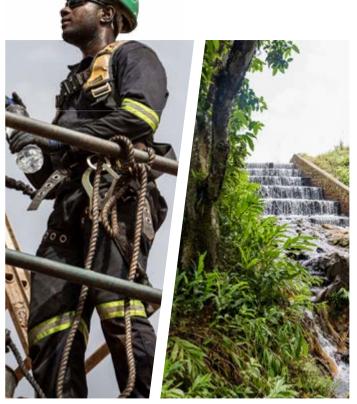
## MINING REPORT









RAISING THE BAR



## SUSTAINABILITY STARTS HERE



INTERIOR PRINTED
ON RECYCLED PAPER



# STATEMENT

## This report has not been externally assured.

Production results and B2Gold Corp.'s (the Company's) guidance presented in this report reflect total production at the mines the Company operates on a 100% basis. Please see our Annual Information Form dated March 19, 2019 for a discussion of our ownership interest in the mines B2Gold operates.

The 2018 Responsible Mining Report has been finalized as of 15 May 2019 and contains certain "forward-looking information" and "forward-looking statements" (collectively "forward-looking statements") within the meaning of applicable securities legislation, including projections; outlook; guidance; forecasts; estimates; and other statements regarding future or estimated financial and operational performance events, gold production and sales, revenues and cash flows, capital and operating costs, including projected cash operating costs and all-in sustaining costs, and budgets; statements regarding future or estimated mine life, metal price assumptions, ore grades or sources, and ore processing; statements regarding anticipated exploration, drilling, development, construction, permitting and other activities or achievements of B2Gold; and including, without limitation: for the year 2019, the Company's projected gold production of 935,000 to 975,000 ounces and projected cash flow being approximately \$370 million or \$410 million in 2019 (based on gold price assumptions of \$1,250 or \$1,300 per ounce, respectively); the expectation that, with the Fekola Mine online, ongoing benefits relating to production, revenue, and cash will continue for many years; the Company maintaining its low-cost structure, focusing on growth in production. revenues and cashflow, and striving to remain in a strong financial position while reducing debt levels; statements related to ongoing resettlements, including the relocation of the Fadougou village. and the timing thereof; at Otjikoto, the estimated emissions of the heavy fuel oil generators, the projected operation, payback and reduction in fuel consumption and GHGs as a result of the solar plant, and the opportunity to trade carbon credits and export power to the national grid for revenue; statements regarding the supply chain and local procurement, including the inclusion of the Supplier Code of Conduct in all purchasing and contracting documents with major suppliers; the installation of a system at El Limon to permanently comply with environmental laws, regulations and permit requirements; the expectation that collective agreements will remain in effect until 2020; the goals and projections described in the "Going Forward" items in the "Quick View" of the report beginning on page 5 and various other statements regarding our plans, programs and anticipated future achievements relating to audits, sustainable development (including the United Nations Sustainable Development Goals), climate change, the environment (including potential refinements to the Company's classification

system for environmental incidents), the ecosystem, conservation and biodiversity strategies and measures, reclamation, mine rehabilitation and closure planning, water and water management, waste and tailings management (including the implementation of a third party review requirement, with the first review being at Masbate), human rights, gender diversity, human and worker health and safety (including grievance management mechanisms, the development of employee engagement plans and measures to reduce incidents in high-risk areas of injury and illnesses). hiring, training and performance management systems, social and community development, planned policies, planned measures to address security risks at each of the company's mines, artisanal and small-scale mining, reporting practices and systems and internal systems and practices. All statements in this presentation that address events or developments that we expect to occur in the future are forward-looking statements. Forward-looking statements are statements that are not historical facts and are generally. although not always, identified by words such as "expect", "plan", "anticipate", "project", "target", "potential", "schedule", "forecast", "budget", "estimate", "intend" or "believe" and similar expressions or their negative connotations, or that events or conditions "will", "would", "may", "could", "should" or "might" occur.

Forward-looking statements necessarily involve assumptions, risks and uncertainties, certain of which are beyond B2Gold's control, including risks associated with or related to: the volatility of metal prices and B2Gold's common shares: changes in tax laws; the dangers inherent in exploration, development and mining activities; the uncertainty of reserve and resource estimates; not achieving production, cost or other estimates; actual production, development plans and costs differing materially from the estimates in B2Gold's feasibility studies; the ability to obtain and maintain any necessary permits, consents or authorizations required for mining activities; the current ongoing instability in Nicaragua and the ramifications thereof; environmental regulations or hazards and compliance with complex regulations associated with mining activities; climate change and climate change regulations; the ability to replace mineral reserves and identify acquisition opportunities: the unknown liabilities of companies acquired by B2Gold; the ability to successfully integrate new acquisitions; fluctuations in exchange rates; the availability of financing; financing and debt activities, including potential restrictions imposed on B2Gold's operations as a result thereof and the ability to generate sufficient cash flows; operations in foreign and developing countries and the compliance with foreign laws, including those associated with operations in Mali, Namibia, the Philippines, Nicaragua and Burkina Faso and including risks related to changes

in foreign laws and changing policies related to mining and local ownership requirements or resource nationalization generally; remote operations and the availability of adequate infrastructure; fluctuations in price and availability of energy and other inputs necessary for mining operations; shortages or cost increases in necessary equipment, supplies and labour; regulatory, political and country risks, including local instability or acts of terrorism and the effects thereof; the reliance upon contractors, third parties and joint venture partners; the lack of sole decision-making authority related to Filminera Resources Corporation, which owns the Masbate Project; challenges to title or surface rights; the dependence on key personnel and the ability to attract and retain skilled personnel; the risk of an uninsurable or uninsured loss; adverse climate and weather conditions; litigation risk; competition with other mining companies; community support for B2Gold's operations, including risks related to strikes and the halting of such operations from time to time; conflicts with small-scale miners; failures of information systems or information security threats: the final outcome of the audit by the Philippines Department of Environment and Natural Resources in relation to the Masbate Project; the ability to maintain adequate internal controls over financial reporting as required by law, including Section 404 of the Sarbanes-Oxley Act; compliance with anti-corruption laws, and sanctions or other similar measures: social media and B2Gold's reputation; as well as other factors identified and as described in more detail under the heading "Risk Factors" in B2Gold's most recent Annual Information Form, the Company's current Form 40-F Annual Report and B2Gold's other filings with Canadian securities regulators and the U.S. Securities and Exchange Commission (the "SEC"), which may be viewed at www.sedar.com and www.sec.gov, respectively (the "Websites"). The list is not exhaustive of the factors that may affect the Company's forward-looking statements. There can be no assurance that such statements will prove to be accurate, and actual results. performance or achievements could differ materially from those expressed in, or implied by, these forward-looking statements. Accordingly, no assurance can be given that any events anticipated by the forward-looking statements will transpire or occur, or if any of them do, what benefits or liabilities B2Gold will derive therefrom. The Company's forward-looking statements reflect current expectations regarding future events and operating performance and speak only as of the date hereof, and the Company does not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change other than as required by applicable law. The Company's forward-looking statements are based on the applicable assumptions and factors management considers reasonable as of the date hereof, based on the information available to management at such time. These assumptions and factors include, but are not limited to, assumptions and factors related to the Company's ability to carry on current and future operations. including development and exploration activities; the timing, extent, duration and economic viability of such operations, including any mineral resources or reserves identified thereby; the accuracy and reliability of estimates, projections, forecasts, studies and assessments: the Company's ability to meet or achieve estimates. projections and forecasts; the availability and cost of inputs; the price and market for outputs, including gold; the timely receipt of necessary approvals or permits: the ability to meet current and future obligations; the ability to obtain timely financing on reasonable terms when required; the current and future social, economic and political conditions; and other assumptions and factors generally associated with the mining industry. For the reasons set forth above, undue reliance should not be placed on forward-looking statements.

### **NON-IFRS MEASURES**

This document includes certain terms or performance measures commonly used in the mining industry that are not defined under International Financial Reporting Standards ("IFRS"), including "cash operating costs", "all-in sustaining costs" (or "AISC"), "adjusted cash operating costs" and "free cash flows." Non-IFRS measures do not have any standardized meaning prescribed under IFRS, and therefore they may not be comparable to similar measures employed by other companies. The data presented is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS, and should be read in conjunction with B2Gold's consolidated financial statements. Readers should refer to B2Gold's management discussion and analysis, available under B2Gold's corporate profile at www.sedar.com and at www.sec.gov or on its website at www.b2gold.com, under the heading "Non-IFRS Measures" for a more detailed discussion of how B2Gold calculates certain such measures and a reconciliation of certain measures to IFRS terms.

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## MESSAGE FROM THE CEO

On so many levels, 2018 has been a tremendous year for B2Gold. It was our 10th consecutive year of record production – producing just under a million ounces of gold. We almost doubled our gold revenue and tripled our cash flow from operations. This success allowed us to distribute significant economic value to employees, suppliers, shareholders, governments and communities.

Our new Fekola Mine in Mali, in its first full-year of commercial production, continued to exceed our expectations in performance and near-mine exploration. The Masbate Mine in the Philippines achieved record annual gold production – exceeding the upper limit of its already increased guidance range. Otjikoto's new Solar Plant in Namibia is now providing approximately 13% of the electricity consumed on site – reducing HFO consumption by approximately 2.4 million litres and reducing associated power generation fuel costs by approximately 10% in 2018. Our mines in Nicaragua surpassed their safety performance records with LTI reduction levels of 71% at La Libertad and 50% at El Limon.

The people who choose to work at B2Gold have made these achievements happen. The dedication to be accountable and responsible is seen in individuals across our operations. I want to acknowledge the contributions of our people and thank them for sharing in our success. Effective employee relations and community relations help us to advance our strategy and achieve positive results, as so many of our employees come from the diverse regions where we operate. We are proud that our local employment rate is 97% across our five main mines.

As we continue to grow, we remain grounded in our commitment to Health and Safety, Environment and Social performance — which are exemplified in this 2018 Responsible Mining Report. Our environmental management system has begun to address climate change impacts through our first Greenhouse Gas Emissions Inventory reporting at our Otjikoto Mine. We continued to invest in security training in the Voluntary Principles and conducting human rights assessments — now four of our five mines have received assessments. While our progress was slower than we had anticipated for addressing gender diversity in our workplace, early in 2019 we kicked off an initiative that includes expert consultants to help us to address industry barriers and accelerate our progress.

In 2018, we achieved our best safety year yet—completing our third consecutive year with no fatalities and reducing our Lost-Time Injury Frequency Rate globally by over 50%. This included reaching over three years and approximately 17.8 million hours without a Lost-Time Injury (LTI) at Masbate while Otjikoto hit one year without an LTI in early 2019.

Our colleagues in Nicaragua have had a challenging year due to political unrest and uncertainties that have gripped the nation since April last year. B2Gold has operated in Nicaragua for over a decade. It is where we started the company. We've been very successful there, with two mines that have made significant contributions to Nicaragua and the B2Gold production portfolio over the last 10 years. The consistent efforts and disciplined

WHAT WE LEARNED FROM 2018 IS THAT WE CAN WORK FOR B2GOLD AND BE RESPONSIBLE. EVERY DAY.

stakeholder engagement by our Nicaraguan team have helped them to weather the storm. It is a testament to their experience and resilience that they've been able to complete 2018 without a day of lost production as a result of the unrest.

I am often asked how B2Gold manages to work in jurisdictions which are diverse and may be viewed as "challenging." In my mind, the secret of B2Gold's success is our ability to establish positive relationships with local governments and communities, and that we deliver on the promises we make. We make a genuine commitment to stakeholders to *deliver* and to be a responsible company. Our 2018 Responsible Mining Report demonstrates our execution on this promise. Our culture based on our core principles of fairness, respect, transparency and accountability is truly entrenched in our company.

It is also these principles that compelled us – after a decade of exceptional growth – to turn our attention inward during 2018. I challenged myself and the Company

to look at ourselves critically and determine how we can be the best B2Gold that we can be and raise the bar further. We also listened to the priorities of governments, communities, shareholders and broader civil society to ensure our priorities were aligned. In 2018 we began to map the United Nations Sustainable Development Goals to our activities.

Our findings reinforce our commitment to Responsible Mining. If we can govern our business in an ethical manner, create opportunities for people around the world through skills development and good working conditions, and invest in conservation of scarce resources and environments – we will realize my expectations for B2Gold and myself as CEO. When our management team visits our sites around the globe and people approach us to say "B2Gold has changed my life" – that fills us with the energy to continue to develop this great company.

What we learned from 2018 is that we can work for B2Gold and be Responsible. Every Day.

CLIVE JOHNSON

President & Chief Executive Officer

C Hours



# ABOUT THIS REPORT

This third annual B2Gold Responsible Mining Report covers the reporting period of January to December 2018

Our report has been prepared in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Standards (Core Option) and the G4 Mining and Metals Sector Disclosures<sup>1</sup>, and is aligned with the principles of integrated reporting. The report has not been externally assured.

Development of B2Gold's sustainability reporting is ongoing as we expand our reporting to align with additional frameworks. In 2018 we introduce the mapping of our performance against the United Nations Sustainable Development Goals (SDGs) in order to broaden how we communicate our performance to stakeholders. Our corporate-level working group continues to lead the reporting process with country-level counterpart working groups in Nicaragua, the Philippines, Namibia, and Mali. The report has been reviewed and approved by B2Gold's Corporate Executive.

## LISTED ENTITIES INCLUDED IN OUR FINANCIAL STATEMENTS ARE<sup>2</sup>:

- » Desarrollo Minero de Nicaragua SA (La Libertad) 100% interest
- » Triton Minera SA (El Limon) 100% interest<sup>3</sup>
- » Phil. Gold Processing & Refining Corporation (Masbate) **100% interest**
- Filminera Resources Corporation (Masbate) 40% interest
- » B2Gold Namibia (Pty) Ltd. (Otjikoto) 90% interest
- » Kiaka SA (Kiaka) **81% interest**
- » Fekola SA (Fekola) **80% interest**<sup>4</sup>



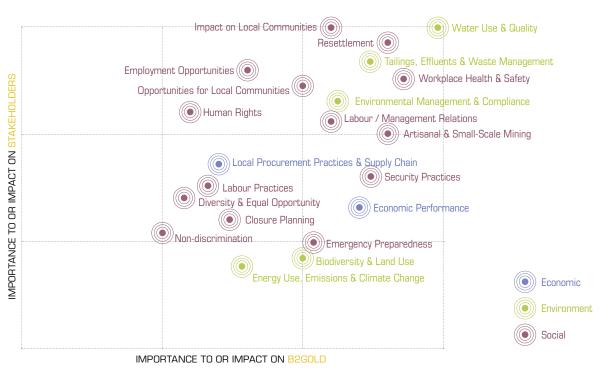


The process for considering material topics included an assessment of sustainability aspects in terms of their importance to, or impact on, the Company and their importance to, or impact on, our stakeholders. The assessments were conducted by six cross-functional teams<sup>5</sup>. The results were aggregated, further analyzed and corresponding indicators were chosen. For 2018, our methodology included the review of external stakeholder concerns that were collected during environmental and social impact assessments (ESIAs), various external

**GRAPH 1** | Materiality Assessment

and internal stakeholder consultations, and the analysis of community grievance reports. No dedicated external stakeholder consultation was performed for material topics.

It is recognized that many of our material topics are interrelated; for example, our economic performance delivers our ability to invest in environmental stewardship and opportunities for communities. In this report, we focused on our five operating mines (La Libertad and El Limon in Nicaragua, Masbate in the Philippines, Otjikoto in Namibia, and Fekola in Mali), including satellite mines and near-mine (brownfield) exploration activities.



<sup>13</sup>See GRI Index tables starting on page 95 for a full listing of GRI General and Topic Specific Disclosures covered in this report.

 $^{\text{[2]}}$ Additional information can be obtained from www.sedar.com and www.b2gold.com.

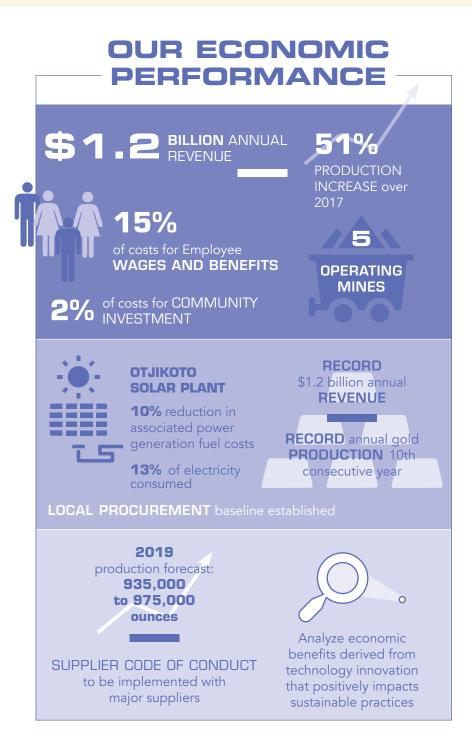
<sup>[3]</sup>On May 22, 2018, B2Gold through its wholly owned subsidiary, Triton Mining Corporation, purchased the remaining 5% share interest in Triton Minera SA, the entity that owns the El Limon Mine, from Inversiones Mineras SA (IMISA).

<sup>(4)</sup>Fekola SA's ownership interest was adjusted from 90% to 80% (B2Gold) and 20% (State of Mali), respectively, in June 2018, as more particularly described in the Company's Q1 2018 Management Discussion and Analysis.

<sup>[5]</sup> Six cross-functional teams include representatives from Environment, OHS, CSR/Social, Operations and Engineering, Community Relations, Government Relations, Human Resources, Finance and Management from each region and Corporate, plus the Corporate Executive team.

Where relevant, regional and corporate offices are included. Offices include Vancouver (Canada), Managua (Nicaragua), Makati (Philippines), Windhoek (Namibia), and Bamako (Mali), along with the associated mine, project, and exploration offices.

Regional and greenfield exploration projects are not included, unless they are tied into site statistics. The only exception to the above report parameters is the reporting of employment data. Employees from all B2Gold operations across the globe are included.





## **OUR PEOPLE**

**5,242**EMPLOYEES

Comprehensive
OHS MANAGEMENT
SYSTEM &
STANDARDS in place



**13%** 

FEMALE employees

22%

in senior positions

**EMERGENCY** PREVENTION & PREPAREDNESS PLANS at all sites

97% LOCAL EMPLOYMENT

GENDER DIVERSITY initiative established



**50%** reduction in LTI FREQUENCY RATE, globally



FATIGUE MONITORING SOLUTION implemented at Otiikoto



GENDER DIVERSITY STRATEGY to be IMPLEMENTED

## NAMIBIA AFFIRMATIVE ACTION STRATEGY

Qualitative Surveys to be conducted

FATIGUE MONITORING
SOLUTION to be
implemented AT FEKOLA

## **OUR COMMUNITIES**

SOCIAL PERFORMANCE MANAGEMENT SYSTEM & STANDARDS IN PLACE

> GRIEVANCE MECHANISMS at all sites



OPEN DOOR APPROACH



VPs Security & HUMAN RIGHTS
TRAINING at Masbate and La Libertad

HUMAN RIGHTS ASSESSMENTS in Namibia and Nicaragua

SOCIAL performance internal AUDITS completed at four mines (Fekola due in 2019) PRO-ACTIVE LIVELIHOOD
DEVELOPMENT
for Fekola communities

TRAINING
to be rolled out at
ALL OPERATIONS



HUMAN RIGHTS
ASSESSMENT
planned for El Limon

NEW FADOUGOU construction to be
COMPLETED and residents resettled to new homes

# ABOUT

SDGs

FIGURE 1 | Our Timeline

**Initial Public Offering** \$100 M CDN

Acquisition of the El Limon and La Libertad mines in Nicaragua through a merger with Central Sun Mining Inc.

**Acquisition of Otjikoto Project in Namibia** through a merger with Auryx Gold Corp.

**Acquisition of the Fekola** Project in Mali through a merger with Papillon **Resources Limited** 

2015

**Fekola Mine achieves** commercial production

2008

2009

2010

2011

2012

2013

2014

2016

2017

2018

2007

Gold production began

at the La Libertad Mine

following the completion of

the conversion of the mine

from a closed heap leach

mine to a conventional

milling operation

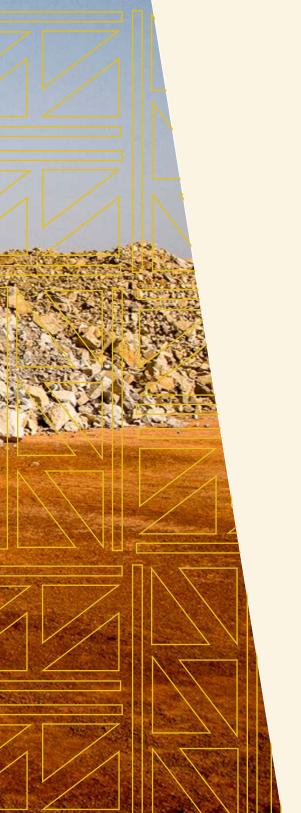
Acquisition of the **Masbate Gold Project in** the Philippines through a merger with **CGA Mining Limited** 

**Acquisition of Kiaka Project** and exploration projects in Burkina Faso and Ghana through a merger with Volta Resources Inc.

**Construction of Otjikoto** Mine commences

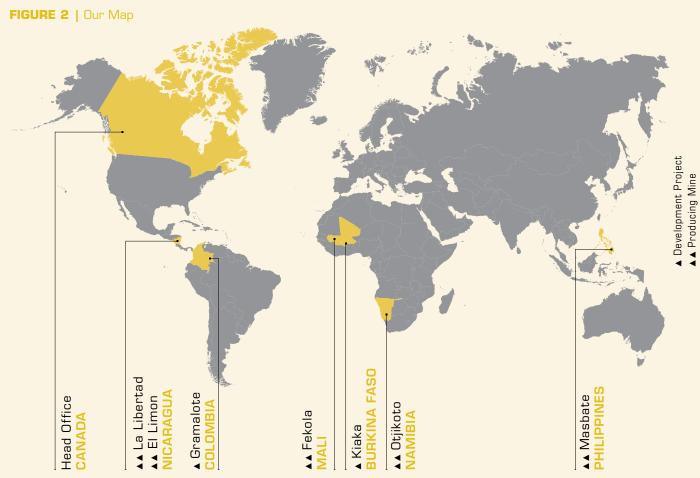
Otjikoto Mine achieves commercial production

Construction of **Fekola Mine commences** 



B2Gold is a senior gold producer focused on responsible mining practices, headquartered in Vancouver, Canada. Founded in 2007, today, B2Gold has five operating gold mines and numerous exploration and development projects in various countries, including Nicaragua, the Philippines, Namibia, Mali, Burkina Faso, and Colombia. With the addition of B2Gold's fifth mine (Fekola Mine, Mali) we are maintaining our low-cost structure and growth profile.

Our strategy continues to centre on generating significant growth in gold production, revenues and cash flow by focusing on organic growth by optimizing production from the Company's existing gold mines, continued exploration at and around its mines, and pursuing grassroots exploration opportunities. Concurrently, across the Company's pipeline of high-quality projects and mines, B2Gold will strive to remain in a strong financial position, while reducing debt levels and maintaining our commitment to responsible mining.



# CORPORATE GOVERNANCE

B2Gold recognizes that good governance, environmental stewardship and social responsibility are vital aspects of business and are vital to maintaining our effectiveness. We achieve this by integrating governance, environmental, and social factors into our decision-making. We remain committed to maintaining the high standards that we have established as a responsible miner.

### **BOARD AND EXECUTIVE OVERSIGHT**

B2Gold's eight-member board of directors (Board) is comprised of one female and seven males. Board members routinely complete independence and board evaluation questionnaires which are reviewed by our Corporate Governance and Nominating Committee. Our Governance Committee, comprised entirely of independent directors, is responsible for setting and maintaining the standards of corporate governance process and practices of the Company. These standards are contained in our Code of Business Conduct and Ethics and supporting policies.

TABLE 1 | Board Composition

BOARD			COMMITTEE				
Member	Independent	Gender	Date Appointed to Board	Audit	Corporate Governance and Nominating	Compensation	Health, Safety, Environment, Social and Security
Clive Johnson	No	Male	2006-12-17				
Robert Cross, Chairman	Yes	Male	2007-10-22		С	С	
Robert Gayton	Yes	Male	2007-10-22	С	×	X	
Jerry Korpan	Yes	Male	2007-11-20	Χ	Χ		X
Kevin Bullock	Yes	Male	2013-12-20	Χ			
George Johnson <sup>[1]</sup>	No	Male	2016-03-15				С
Bongani Mtshisi	Yes	Male	2016-12-22			X	X
Robin Weisman	Yes	Female	2017-10-23		X		X

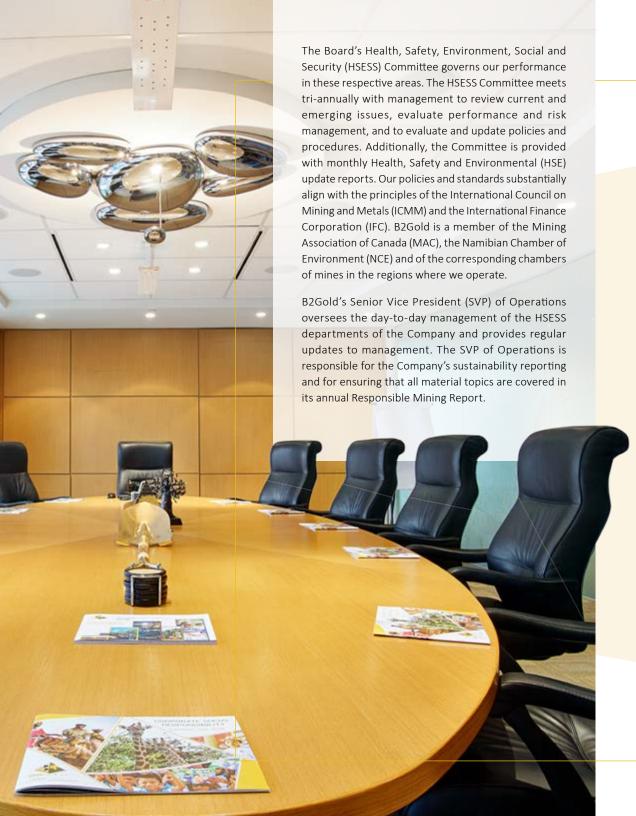
#### **NOTES**



<sup>&</sup>lt;sup>(1)</sup>George Johnson is not considered independent according to Canadian and US securities governance guidelines as he was a senior officer of B2Gold Corp. until April 30, 2015.

C Chair of Committee

X Member of Committee



## BUSINESS ETHICS AND GOVERNANCE PRINCIPLES

B2Gold's Code of Business Conduct and Ethics (Code) defines the standards and values which we expect personnel to follow in all their dealings with stakeholders. While our Board oversees and monitors compliance with the Code, each individual is responsible to comply with the Code as it applies to all B2Gold employees, directors, and officers of the Company and its subsidiaries (see page 11). Additionally, all B2Gold managers or individuals (based in Vancouver or our regional offices) who have influence over certain decision-making aspects, must complete an annual questionnaire, the purpose of which is to monitor compliance with the Code, Anti-Corruption Policy, Disclosure, Confidentiality and Insider Trading Policy, and the Whistleblower Policy. The compliance questionnaire is available in English, French and Spanish to ensure that all individuals fully comprehend the policies, and are confident that reporting any violations of the Code to a member of the Corporate Governance and Nominating Committee will be treated as confidential.

The Governance Committee updates the Code as it deems appropriate in order to reflect changes in the legal and regulatory framework applicable to us, the business practices within our industry, our own business practices, and the prevailing ethical standards of the communities in which we operate. Other corporate governance policies or charters are addressed by the appropriate Board Committee. The following policies and charters were updated in March 2018:

- » Advance Notice Policy
- » Anti-Corruption Policy
- » Audit Committee Charter
- » Board Charter
- » Code of Business Conduct and Ethics
- » Compensation Committee Charter
- » Corporate Governance and Nominating Committee Charter
- Health, Safety, Environment, Social and Security Committee Charter
- » Majority Voting Policy
- » Whistleblower Policy



B2Gold shares the belief that the mining industry has the opportunity and potential to positively contribute to all 17 SDGs. We believe that our company can play an integral role in advancing these goals and we are committed to understanding how we can further align our business activities towards this agenda.

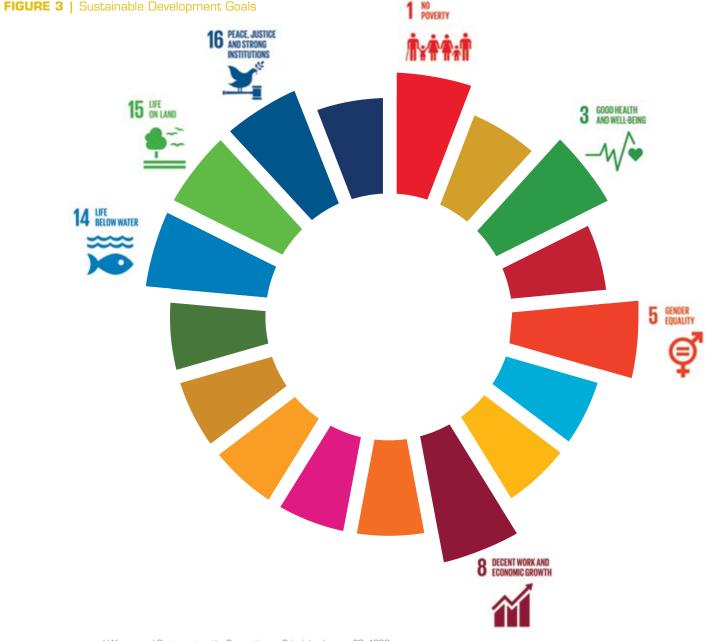
## EMBEDDING SUSTAINABILITY MANAGEMENT

Our management approach to sustainability is to work within the social, economic and environmental contexts in a way that delivers positive outcomes for our business and our stakeholders for the short and long term. Much of this approach is demonstrated in this report. We recognize that risks and impacts associated with our business are inter-related and their management requires cross-functional collaboration among our departments and with our various stakeholders. Our process for risk management aligns with the precautionary principle<sup>6</sup> and includes identifying, evaluating and addressing economic, social and environmental risks and opportunities for our projects and operations.

#### **MAPPING TO THE SDGS**

Mining, as an industry, has been mapped<sup>7</sup> to the SDGs. In 2018, B2Gold started a process to understand our current contributions to sustainable development. We determined that we already contribute significantly to several SDGs – seven SDGs have been highlighted in Table 2.

Going forward, our aim is to broaden our approach to embedding sustainable development principles throughout our business, and to prioritize certain SDGs that best align with our activities and our ability to make positive contributions.



<sup>&</sup>lt;sup>6</sup> Wingspread Statement on the Precautionary Principle; January 20, 1998.

<sup>&</sup>lt;sup>7</sup> Mapping Mining to the Sustainable Development Goals: An Atlas; July 2016; produced by Columbia Centre on Sustainable Development, UNDP, UN Sustainable Development Network, and the World Economic Forum.

#### SDG Goal



End poverty in all its forms everywhere

#### Contribution and Examples

B2Gold contributes to increasing the prosperity of communities and regions where we operate through local employment opportunities, taxes and royalty payments to governments, local procurement practices, and investing in community projects. Several example programs are mentioned throughout this report. We report on payments to governments through annual reports and Extractive Sector Transparency Measures Act (ESTMA) filings.



Ensure healthy lives and promote well-being for all at all ages

Managing the health and safety of all employees and contractors is critical for B2Gold. Year on year we have improved our workplace safety performance across all operations. We also invest in health and wellness programs in the communities where we work. Examples include HIV awareness campaigns, early childhood education programs, and numerous bursaries and scholarship programs for children, youth and employees. Many are highlighted in this report.



Achieve gender equality and empower all women and girls

B2Gold annually reports female representation across our workforce. Following an internal assessment (2017) and senior management sensitization workshop (2018), we are initiating a gender diversity strategy which begins in 2019. Many of our community investment programs target women and girls as beneficiaries.



Promote inclusive and sustainable economic growth, employment and decent work for all B2Gold has implemented local procurement and local employment standards in each region. We annually report on these aspects. In addition to our direct economic contributions through jobs, benefits and a stable work environment, we engage with local communities and invest in sustainable livelihood projects that strengthen capacity and develop diversified local economies. Where resettlement is necessary, we include livelihood restoration as an essential element.



Conserve and sustainably use the oceans, seas and marine resources

The appreciation of our oceans and marine resources is shared by B2Gold. In the Philippines, we identified an opportunity to contribute significantly to the conservation of oceans and marine resources as well as incentivizing traditional fisherfolk to change unsustainable practices. B2Gold's signature project for ocean and marine conservation is captured in the *One Ocean* documentary (found on www.b2gold.com). By working with local stakeholders we are restoring coral reefs, reforesting mangroves, protecting marine life, and facilitating the adoption of sustainable fishing practices. We partnered with the Reef Ball Foundation, local governments and organizations, and established a Marine Protected Area (MPA) to protect the coastal and marine environment.



Protect, restore and promote sustainable use of terrestrial ecosystems

Mining has the potential to impact biodiversity and to alter ecosystems in a significant and highly visible way. Protecting the world's ecosystems is important to us and to our stakeholders. B2Gold is committed to biodiversity conservation and integrated approaches to land use planning at our operations. Our approach to land use and rehabilitation follows best practice and includes reforestation and afforestation activities, as described in this report. In Namibia, B2Gold goes beyond environmental compliance through the following: the creation of the Otjikoto Nature Reserve (which is home to ongoing wildlife conservation and to the development of environment and conservation education programs) and spearheading the establishment of the Namibian Chamber of the Environment. In other regions, we work with local stakeholders to promote sustainable land use plans.



Promote peaceful and inclusive societies for sustainable development B2Gold's principles of fairness, respect, transparency and accountability direct how we conduct our business. We expect our employees and partners to deal with everyone in this manner, and are guided by our Code of Ethics, Stakeholder Engagement, Anti-Corruption, and many other policies. We develop environmental and social management plans with the inclusion of local stakeholders. We disclose annually our economic, governance, environmental and social performance and investments. We abide by all laws, regulations and rules that govern these aspects. We proactively conducted Human Rights Assessments at four of our five operations (fifth to be conducted in 2019) in order to identify and analyze where there may be human rights risks and, if risks were present, their associated impacts. The assessments are followed up with management action plans, and improved human rights awareness and training.

## Our Stakeholders

As a global company, our range of stakeholders is broad. Our methods of communicating with stakeholders vary, as does the frequency of communication.

Corporately, we communicate via our Annual General Meetings, corporate publications (including Annual Report, Responsible Mining Report, SEDAR filings and topic-specific reports and videos), our website (www.b2gold.com), and press statements to the market and media. Senior management regularly engages with stakeholders on governance and HSESS matters via quarterly conference calls, news releases, investor and analyst site tours, investor days, mining industry conferences and other forums throughout the year.

Regionally, each operation is required to plan and implement stakeholder engagement activities. Government stakeholders are regularly consulted by regional management, corporate executives and by our VP of Government Relations throughout all stages of our operations. Multiple engagement strategies are utilized with community stakeholders which are detailed in our Community section on pages 65 to 84, including local meetings, consultation forums, grievance mechanisms, video documentaries and local media.

Our employees and contractors are key stakeholders that we engage with using specific internal mechanisms, detailed on pages 41 to 50. Issuebased employee committees, internal newsletters, grievance mechanisms, and engagement surveys form part of our communication methods.

Suppliers and business partners are increasingly benefiting from our internal and external communication methods.







FOR THE TENTH CONSECUTIVE YEAR,
THE COMPANY ACHIEVED RECORD ANNUAL
CONSOLIDATED GOLD PRODUCTION.

# SUSTAINABLE ECONOMIC GROWTH

The performance of the gold mining industry in 2018 was ever-changing as gold demand grew modestly and gold supply grew fractionally – growth from mine production was 1%8. Within this modest backdrop, B2Gold continues its trajectory of sustainable economic growth.

For B2Gold, 2018 was a year of transformational growth, driven by the first full-year of commercial production from its new large, low-cost Fekola Mine in Mali and record annual production from its Masbate Mine in the Philippines. For the 10th consecutive year, the Company achieved record annual consolidated gold production. As a result of 2018 gold production of over 950,000 ounces, a 51% increase over 2017, B2Gold nearly doubled its reported gold revenues for the year in 2018 to \$1.2 billion. Due to the increase in low-cost production from Fekola and the Company's ongoing disciplined cost control at all projects, reported cash flows from operations nearly tripled from \$155 million in 2017, to \$451 million in 2018. B2Gold utilized this additional cash flow to reduce debt by \$220 million, from approximately \$700 million at the beginning of the year to \$480 million by year-end.

The Fekola Mine success is the latest in a series of accretive acquisitions, construction and exploration successes that have resulted in a steady rise in profitable production over the last 11 years: from 2007, when B2Gold was created as a junior exploration company with no gold production, to 2018, producing over 950,000 ounces of gold from the Company's five gold mines in four countries.

In 2019, B2Gold remains well positioned for continued strong operational and financial performance with consolidated gold production forecast to be between 935,000 and 975,000 ounces.

With the Fekola Mine on line, increased gold production combined with low costs have dramatically increased B2Gold's overall production, revenues, cash from operations and free cash flows with ongoing benefits expected to continue for many years, based on current assumptions.

<sup>8</sup> World Gold Council; 2018 Annual Review; published February 2019.

**TABLE 3** | Production $^{[1]}$ 

	2017 ACTUAL		2019 GUIDANCE RANGE <sup>[5]</sup>
CONSOLIDATED GOLD PRODUCTION	630,565 OUNCES <sup>[3]</sup>		935,000 — 975,000 ounces
CONSOLIDATED CASH OPERATING COSTS <sup>[2]</sup>	\$542 PER OUNCE <sup>[4]</sup>	\$495 PER OUNCE	\$520 — \$560 PER OUNCE
ALL-IN SUSTAINING COSTS (AISC) <sup>[2]</sup>	\$860 PER OUNCE <sup>[4]</sup>	\$758 PER OUNCE	\$835 — \$875 PER OUNCE

Consolidated gold revenue was a record \$1.2 billion in 2018 on record sales of 970,409 ounces at an average price of \$1,262 per ounce compared to \$639 million (excluding \$101 million of pre-commercial sales from Fekola) on sales of 510,966 ounces at an average price of \$1,250 per ounce in 2017.

Revenues are defined as "gold revenue", as proceeds from silver sales are considered to be a by-product and credited against production costs for accounting purposes. Proceeds from interest income or sale of assets are not considered material.

#### NOTES

- <sup>[1]</sup> Production results/forecasts are based on a 100% basis
- [2] See "Non-IFRS Measures" in Cautionary Statement
- [3] Includes 79,243 oz of gold produced during the Fekola Mine's pre-commercial production period
- [4] Includes the Fekola Mine's pre-commercial production results

**TABLE 4** | 2018 Economic Value Generated

MALI FEKOLA 560,516 441,900 PHILIPPINES MASBATE

283,366
223.500

NAMIBIA OTJIKOTO 213,052 168,296 NICARAGUA LA LIBERTAD 105,151 83,018

68,486 53,695

**EL LIMON** 

CANADA HEAD OFFICE[1]

D OFFICE<sup>[1]</sup> CONSOLIDATED

(5,510)

1,225,061 970,409

#### NOTES

<sup>(1)</sup> Relates to the Company's Prepaid Sales Contracts (relating to the difference between the gold spot price at the time of delivery and the gold price when the Company entered into the contracts in March 2016).

Gold Revenue (\$ '000)

Gold Sold (ounces)

<sup>[5]</sup> Based on current assumptions

## ECONOMIC VALUE GENERATED AND DISTRIBUTED

Our successful business results in 2018 are celebrated by our shareholders. B2Gold also celebrates this success with the many stakeholders in the countries, regions and communities where we operate. Our economic performance is also measured by the economic value that we generate for others, including payments to governments through taxes and royalties, local hiring and procurement, and investment in communities.

Understanding how that economic value is distributed among employees, within the countries where we operate, and specifically the investments we make within our host communities, influences our business decisions and underpins B2Gold's economic responsibility.

TABLE 5 | 2018 Economic Value Distributed and Retained (\$ '000)

#### NOTES

- <sup>(1)</sup> Adjusted Cash Operating Costs are "Cash Operating Costs" (see "Non-IFRS Measures") less Employee Wages and Benefits of \$122.8 million directly related to operations. Adjusted Cash Operating Costs are presented in the table below instead of Cash Operating Costs to avoid double-counting Employee Wages and Benefits, which are separately presented in column D.
- <sup>[2]</sup> Capital Expenditures consist of sustaining and nonsustaining capital expenditures, including exploration at development projects and are reported on a cash basis.
- <sup>[3]</sup> Payments to Government consist of income and withholding taxes, production taxes, property taxes and business licences, and the 10% priority dividend to the State of Mali.
- <sup>(4)</sup> Masbate's 2018 Social Development Tax of \$2.3 million is presented as Community Investments in this table.
- <sup>[5]</sup> Includes \$0.5 million for Otjikoto's Nature Reserve expenditure for 2018.
- <sup>(6)</sup> Includes \$11.4 million for Fadougou village relocation costs for 2018.

		Payments	to Suppliers	Employee Wages and Benefits	Payments to Providers of Capital	Payments to Government <sup>[3]</sup> (F)	Community Investments (G)	Economic Value Retained (H)=(A)-(B)-(C)-(D)-(E)- (F)-(G)
MINE	Gold Revenue (A)	Adjusted Cash Operating Costs <sup>[1]</sup> (B)	Capital Expenditures <sup>[2]</sup> (C)					
Fekola	560,516	101,796	57,158	46,906	4,054	121,047	13,495 <sup>(6)</sup>	216,060
Masbate	283,366	104,742	47,905	15,469	811	33,145	3,217 <sup>(4)</sup>	78,077
Otjikoto	213,052	49,315	50,831	38,313	1,219	10,384	1,694 <sup>(5)</sup>	61,296
La Libertad	105,151	63,561	16,143	12,950	36	4,567	683	7,211
El Limon	68,486	30,022	22,008	17,423	1	2,841	1,958	(5,767)
Exploration	_	_	60,138	_	_		_	(60,138)
Other (Head Office)	(5,510)	-	7,923	21,601	26,764	-	118	(61,916)
TOTAL	1,225,061	349,436	262,106	152,662	32,885	171,984	21,165	234,823



During 2018, the Company invested total capital expenditures of \$262 million, including \$60 million for both greenfield and brownfield exploration.

The grand opening of Otjikoto's Solar Plant was held on May 29, 2018 and is now providing approximately 13% of the electricity consumed on site (see feature story on page 21). Changing the power plant to a heavy fuel oil (HFO) solar hybrid plant reduced Otjikoto's HFO consumption by approximately 2.4 million litres and reduced associated power generation fuel costs by approximately 10% in 2018.

Community investment was \$21 million in 2018, an increase of \$6 million (42%) over 2017, and in 2018 represented approximately 2% of the total costs incurred. The most significant investment this year was the Fadougou village relocation in Mali. The Company is in the process of resettling 913 households from the nearby Fadougou village to a new site, which includes construction of improved housing with access to potable water, solar panels for lighting, and community facilities. \$11 million was spent on the resettlement project in 2018. The relocation of village inhabitants is expected to commence in April 2019.

Payments to governments increased to \$172 million in 2018, representing approximately 17% of the total costs incurred – a result of bringing the profitable new Fekola Mine into commercial production in late 2017.

#### **OUTLOOK**

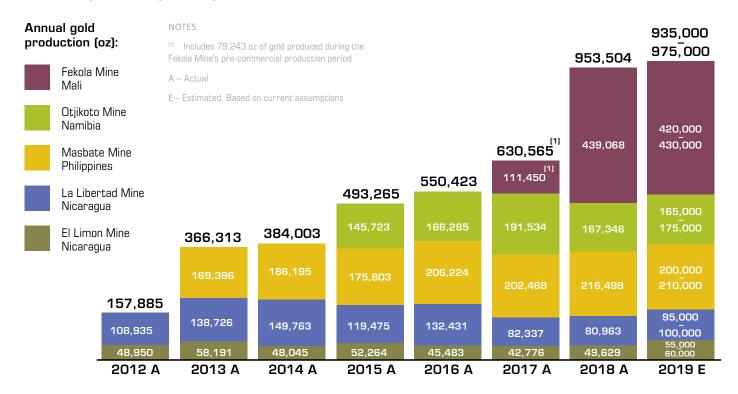
In 2019, B2Gold remains well positioned for continued strong operational and financial performance, with consolidated gold production forecast to be between 935,000 and 975,000 ounces.

Consolidated cash costs are projected to remain low in 2019 with cash operating costs forecast to be between \$520 and \$560 per ounce (2018 guidance was between \$505 and \$550 per ounce) and AISC forecast to be between \$835 and \$875 per ounce (2018 guidance was between \$780 and \$830 per ounce). The budgeted 6% increase in AISC per ounce over 2018 guidance mainly relates to slightly higher forecast cash operating costs and higher than expected pre-stripping sustaining capital costs at Otjikoto.

IN 2019, B2GOLD REMAINS WELL POSITIONED FOR CONTINUED STRONG OPERATIONAL AND FINANCIAL PERFORMANCE WITH CONSOLIDATED GOLD PRODUCTION FORECAST TO BE BETWEEN 935,000 AND 975,000 OUNCES.

If a gold price assumption of \$1,300 per ounce is used, the Company expects to generate cash flow from operations of approximately \$410 million in 2019. (If a gold price assumption of \$1,250 per ounce is used for 2019, the Company expects to generate cash flow from operations of approximately \$370 million.)

## **GRAPH 3** | Maintaining a Strong and Profitable Production Profile



# OTJIKOTO SOLAR PLANT

ECONOMICAL, SUSTAINABLE, AND PROGRESSIVE

On May 29, 2018, B2Gold celebrated the official opening of the Otjikoto Solar Plant, one of the first fully-autonomous hybrid plants in the world. Driven by a focus on economic discipline and an eagerness to reduce carbon emissions, B2Gold introduced a renewable energy solution at the Otjikoto Mine that is also delivering social benefits.

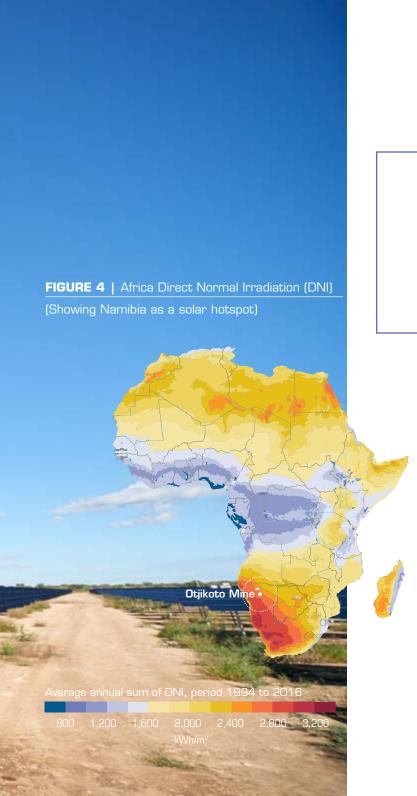
Following a competitive open tender process, B2Gold selected Caterpillar and the local CAT® dealer Barloworld Power for the 7 MW solar power solution. The Otjikoto Solar Plant consists of 62,400 First Solar/CAT photovoltaic (PV) thin film solar panels, with fully autonomous integration and control provided by the proprietary CAT microgrid master controller (MMC).

Prior to the inclusion of the solar plant into the mine's energy portfolio, the Otjikoto Mine obtained all of its energy requirements from 24 MW of installed generation

capacity at the Otjikoto power plant, comprising of heavy fuel oil (HFO) generators. With a consistent demand of 12.5 MW throughout the day and night, in 2017, the HFO plant consumed 21.7 million litres of HFO at a cost of approximately US\$10.5 million. At 3.06 kg  $\rm CO_2$  generation per litre of HFO consumed, the HFO plant emitted 66,400 tonnes of  $\rm CO_2$  into the atmosphere in 2017. Over the projected 10-year life of mine, it is estimated that the HFO engines would emit over 660,000 tonnes of  $\rm CO_2$ . The drivers for B2Gold to seek greener alternatives to its energy requirements are both economic and environmental.

Given that Namibia has one of the highest solar irradiance levels in the world, solar energy seemed an obvious consideration for a green energy alternative. Namibia's solar irradiation levels are estimated at a daily rate of 5 to 6 kWh/m² (equivalent to around 1,800 to 2,200 kWh/m²/year) with up to 10 hours a day of sunshine for more than 300 days a year. The Namibian government has supported multiple initiatives towards a more sustainable and environmentally friendly power supply mix. As a result, several large-scale multi-megawatt PV plants have been built in recent years — which offered B2Gold an opportunity to learn from these installations.





IN 2018, THE PLANT PROVIDED
APPROXIMATELY 13% OF THE
ELECTRICITY CONSUMED ON SITE, WITH
SAVINGS OF 2.36 MILLION LITRES OF
FUEL FROM THE SECOND QUARTER OF
2018 UNTIL THE END OF THE YEAR.

The detailed feasibility study conducted in 2017 indicated that the introduction of a 7 MW peak PV plant would significantly reduce fuel consumption and greenhouse gas (GHG) emissions at the site's HFO power plant. Quite apart from the obvious environmental benefits, the study showed impressive returns on the investment of approximately US\$8.8 million.

In 2018, the plant provided approximately 13% of the electricity consumed on site, with savings of 2.36 million litres of fuel from the second quarter of 2018 until the end of the year. The reduction in GHG emissions for the same period is estimated at 7,200 tonnes of CO<sub>2</sub>. With these results, the payback period is estimated to be less than 4.3 years and a reduction in GHG emissions over the life of mine is estimated at 86,000 tonnes of CO<sub>2</sub>. B2Gold furthered its consideration by completing a GHG emissions inventory at the Otjikoto Mine (see page 31 for more details.)

In line with B2Gold's focus on local procurement and SME development, the Company made it a requirement of all tenderers to the project that the plant should be constructed by Namibian contractors with only Namibian employees. More than 120 Namibians received on-the-job training to build the plant, empowering them with much needed skills and experience in a country that is sure to continue building PV plants well into the future.

Going forward, B2Gold is exploring an opportunity of trading the carbon credits resulting from the reduction in GHG emissions. Should the negotiations be successful, this financial credit could partially offset costs and be invested in local CSR programs. B2Gold is also considering an opportunity for the PV plant to export power to the national grid which would be purchased by the local utility. The revenue could partially address post-mining requirements and contribute to ongoing CSR programs.

Not only will the solar plant significantly reduce the operational costs of the mine and make an impact on the company's GHG profile, it has also contributed to developing skills locally and has the potential to support the continuation of its CSR initiatives well into the future. Through the Otjikoto Solar Plant, B2Gold will be leaving a lasting and sustainable legacy.

## SUPPLY CHAIN AND LOCAL PROCUREMENT

From exploration to closure, the Company procures a diverse range of goods and services which include heavy equipment, process chemicals, fuel and oils, explosives, equipment parts, and professional services. Our Corporate and site Supply Chain departments work with suppliers and contractors based on the principles of long-term partnership, fair competition, and ethical conduct. We apply pre-qualification and tendering processes and procedures, commercial terms and conditions and ongoing oversight to monitor the business practices of suppliers and contractors.

As part of our commitment to human rights and ongoing efforts to improve supplier management, we developed a Supplier Code of Conduct in 2018 that was reviewed by general managers and executives and approved by the B2Gold Board. It outlines our expectations that suppliers act in accordance with our corporate commitments in their management of health and safety, labour and human rights, environment, business conduct and ethics, and socio-economic development. In 2019 we will begin including our Supplier Code of Conduct in all purchasing and contracting documents with major suppliers as an initial stage in its implementation. Corporate and site Supply Chain and Community Relations staff will work together in 2019 to implement the Supplier Code of Conduct into existing screening, contracting, and supplier management practices.

As part of the human rights assessments conducted in Mali, the Philippines, Namibia and Nicaragua (see page 67), significant on-site contractors were screened, and mitigation plans put in place where issues were identified (including improving access to grievance mechanisms and timely payment of salaries). The risks for forced or child labour and human trafficking were considered; no significant risks were identified. Issues related to

contractor behaviour such as safe driving and working conditions, and ensuring fair wages were raised in 2018 by stakeholders at both mines in Nicaragua. These issues were addressed directly with suppliers at La Libertad; at El Limon a multi-stakeholder local employment commission was formed to strengthen practices and performances.

B2Gold is committed to maximizing local and national economic benefits from our contracting and purchasing. In sourcing the goods and services necessary to run our operations, we give preference to local businesses where possible, provided they meet minimum safety, quality, ethical, and cost requirements. Our Local Content Performance Standard defines the minimum requirements for enhancing local procurement opportunities and benefits.

Supply Chain and Community Relations departments coordinate to build the capacity of local suppliers and small businesses, either directly or through service providers, and track our performance regarding local procurement. In 2018 we engaged an external consultant to conduct assessments and develop local procurement plans in Namibia and Mali. These sites were selected as they are both relatively early in the life of mine, and they both face significant pressure from national and local stakeholders to enhance local procurement. While significant efforts have been made to utilize national and local suppliers at both mines, the limited numbers and capacity of local suppliers constrain the volume of procurement close to the mines.

TABLE 6 | Supply Chain and Local Procurement

NOTES nr = not reported

Mine	<b>Definition of</b> "Local – Community Level"	<b>Definition of</b> "Local – National Level"	Local – Community Level (% of total purchasing)	Local – National Level (% of total purchasing)	
<b>La Libertad,</b> Nicaragua	Surrounding municipalities (La Libertad, Santo Domingo, Juigalpa and Santo Tomás)	Nicaraguan registered business or subsidiary of an international company with payments	2.26%	44%	
<b>El Limon,</b> Nicaragua	Directly impacted communities (e.g. El Limon mining district)	completed at national level	1.55%		
<b>Masbate,</b> Philippines	Aroroy Municipality	Companies registered in the Philippines	3.46%	<b>73</b> %	
<b>Otjikoto,</b> Namibia	nr	Companies registered in Namibia	nr	86%	
<b>Fekola,</b> Mali	Kéniéba Cèrcle	Onshore purchase orders (Mali) and paid in national currency (XOF)	0.97%	65%	

AS PART OF OUR COMMITMENT TO HUMAN RIGHTS AND ONGOING EFFORTS TO IMPROVE SUPPLIER MANAGEMENT, WE DEVELOPED A SUPPLIER CODE OF CONDUCT IN 2018 THAT WAS REVIEWED BY **GENERAL MANAGERS AND EXECUTIVES AND** APPROVED BY THE B2GOLD BOARD.

Our Economic Performance | 24

The Supply Chain and Community Relations teams work directly with existing or potential suppliers to ensure they meet our requirements, and partner with external service providers to help build their capacity. There have been several success stories, including:

- » purchase of produce from local women's cooperatives at Fekola (see feature story on page 73);
- » support for local youth to start up a services business at Otjikoto;
- » extending small business training to a tailoring business near El Limon which supplies uniforms to B2Gold and other clientele; and
- » fostering community entrepreneurship to encourage small businesses to become suppliers for the Fekola Mine as well as other sectors through the Adéquation Formation-Emploi dans le Cèrcle de Kéniéba (AFECK) project (see story on page 43).

Sites will continue to strengthen internal systems for identifying opportunities and facilitating local procurement in 2019.





WE HAVE EMBEDDED OUR ENVIRONMENTAL STEWARDSHIP STRATEGY IN OUR ENVIRONMENTAL AND BIODIVERSITY POLICIES, HSE MANAGEMENT SYSTEM, AND PERFORMANCE STANDARDS.

Environmental issues facing the mining industry include water stewardship, waste management (including tailings stewardship), and the risks and opportunities that arise from the planet's changing climate. Competition for land, biodiversity and water resources is continuously increasing due to the world's growing population. Our operations and growth strategy are dependent on obtaining and maintaining access to these environmental resources and we are committed to the efficient use of natural resources and minimizing the impact on, and conserving the quality of, the natural environment from our operations and business activities.

Our strategy is to identify and proactively mitigate and manage our environmental impacts. We have embedded our environmental stewardship strategy in our Environmental and Biodiversity Policies, HSE Management System, and Performance Standards. We comprehensively updated these Policies and Standards in 2018 to incorporate recent developments and improvements in industry standards, and to reflect the growth and the growing maturity of B2Gold's overall management of HSE risk and performance. Our Standards require that we comply with all in-country regulations and are in accordance with relevant International Organization for Standardization (ISO) standards, and reliance on the IFC

Performance Standards and international best practices in cases where national regulatory systems are not sufficiently stringent. In addition to these Standards applied at all of our operations, our Masbate Mine maintains ISO 14001 certification.

Since there may be significant impacts to the environment due to our operations, B2Gold applies a precautionary approach throughout the life of a mine. Embedded in our HSE Policies and Standards and our environmental risk management processes described above (and in subsequent sections below), when developing or implementing changes at our operations, we evaluate potential environmental impacts and evaluate how to mitigate these potential impacts — even when there is a lack of scientific certainty as to the likelihood or magnitude of the impacts.

Our approach and our HSE Management Systems enable us to mitigate and manage the potential risks and impacts of our operations, and the changes introduced in 2018 described above ensure that our internal commitments and requirements are at the forefront of the industry and will drive our continued improvement in the years to come.

## REFORESTATION

## SETTING THE PACE FOR PRIVATE SECTOR

Along the banks of the Mico River in Nicaragua's Chontales Department, lush green granadillo, wild cashew and guanacaste trees are growing. This is just one of the source water protection zones reforested by B2Gold.

"We started the reforestation program in 2010, and year after year we've continued to plant more trees and provide maintenance to those already planted," said Hector Kauffmann, Environmental Superintendent at La Libertad Mine. "As a result, by the end of 2018, B2Gold had directly reforested a total area of 596 hectares." This achievement includes reforested areas near La Libertad and El Limon mines.

TREE SURVIVAL IS CRITICAL

## PARTNERS IN REFORESTATION

"We recognize that one of the major challenges in the reforestation process is to care for the plants until they can survive on their own in their natural environment," said Ramon Garcia, Environmental Coordinator at El Limon Mine. "For this reason, we have brigades of local workers to provide periodic maintenance to the reforested areas, until the trees are big and strong."

According to Garcia, the survival rate for planted trees does not depend solely on climatological conditions in the area, but also on forest maintenance factors such as fertilization, weeding, fencing, and phytosanitary or plant health control. "Our environmental commitment is sincere. When we don't obtain the desired results in our reforestation campaigns, we carry out new campaigns as many times as necessary in order to reach our goals in terms of tree survival."

The care for and survival of planted trees are monitored by the respective municipal government, as well as by the Ministry of Environment and Natural Resources (MARENA) and the National Forestry Institute (INAFOR), which have verified that B2Gold complies with —and surpasses— the requirement to ensure the maintenance of reforested areas for a four-year period.

OUR ENVIRONMENTAL COMMITMENT IS SINCERE. WHEN WE DON'T OBTAIN THE DESIRED RESULTS... WE CARRY OUT NEW CAMPAIGNS AS MANY TIMES AS NECESSARY IN ORDER TO REACH OUR GOALS IN TERMS OF TREE SURVIVAL.

As part of its reforestation program in Nicaragua, B2Gold has also contributed to the National Reforestation Campaign directed by INAFOR, and has supported the Forestry Value Chain Project (CAVAMA). The project was able to establish 2,422 hectares of forestry plantations in Chontales and other departments by offering incentives to farmers and ranchers to plant and maintain trees, many of which were provided by B2Gold.

"Our trees are produced in B2Gold's nurseries in El Limon, La Libertad and Santo Domingo," Garcia said. "Together, our nurseries have the capacity to produce up to 372,000 plants per year. The three nurseries also use micro-spray irrigation systems to save considerable amounts of water."

B2Gold is setting the pace for the private sector in Nicaragua. Having reforested 596 hectares from 2010 to 2018, B2Gold is a leader among non-forestry companies in terms of trees planted in Nicaragua.





# WATER

RESPONSIBLE WATER MANAGEMENT IS FUNDAMENTAL TO MAINTAINING THE TRUST OF OUR COMMUNITIES OF INTEREST IN AREAS WHERE WE OPERATE.

Water is a valuable resource and reliable and sustainable water sources are vital to our operations. Milling and ore processing activities require large amounts of water and mining activities can potentially affect water quality.

We abstract groundwater to allow us to reach orebodies and use water to process ore, manage dust emissions, and supply drinking water and wastewater services. Our operations also consume water through evaporative and entrainment losses on tailings storage facilities, storm water and process ponds, and waste rock facilities. For B2Gold, water is not solely about constrained supply. Each of our operations has its own water risks and impacts — while some operations are located in water-scarce environments, others must manage intense rainfall.

We also recognize the impact our business activities may have on local communities' access to water. Our commitment includes understanding the availability and uses of water within the watersheds where we operate and developing management methods that reduce or mitigate our impacts on water quality and quantity. Responsible water management is fundamental to maintaining the trust of our communities of interest in areas where we operate.

#### WATER MANAGEMENT

B2Gold's water resource management program focuses on site-specific risks and impacts, such as security of water supply and managing the quality of water returned to the environment. In 2018, we updated our Water Management Performance Standard (which sets the minimum requirements to proactively plan, manage and monitor our water risks and performance) to incorporate changes in international best practice and lessons learned across the organization.

Our water resource management efforts are focused on keeping clean water clean and minimizing the amount of water impacted by mining activities. We construct diversion channels where practicable to divert clean water around our facilities and we install high-density polyethylene (HDPE) liners when we build tailings storage facilities (TSFs)<sup>9</sup> and water storage ponds (where necessary) to minimize seepage losses and potential impacts to groundwater resources. All our operations recycle process-water to minimize the use of fresh water to the greatest practical extent.

Across our various sites, water is drawn from surface water and groundwater sources as well as precipitation onto, and run-off into, our facilities. Water is discharged to various receiving environments, including surface water and marine environments, re-injection to groundwater, and evaporative losses. Discharge water is treated, if necessary, to meet the applicable water quality standards and regulatory requirements before being safely discharged.

Our operations use site-wide water balances as a central component of their water management strategies. These water balances have focused on water abstraction and discharge. However, as we reported in 2017, we committed to establish a Water Accounting Framework (WAF) to allow us to improve the standardization of our water use reporting

across our operations and improve our water management performance. In 2018, we piloted the completion of a WAF at our Otjikoto operation. The WAF aligns with the ICMM's water reporting guidance and disclosure standard<sup>10</sup>. The WAF allows the Otjikoto operation to report more complete information regarding water use inputs, outputs and changes in storage. Inputs and outputs are classified by accuracy (measured, estimated or calculated) and by water quality (see data presented on page 30). Category 1 water quality is close to drinking water standards; Category 2 is suitable for some purposes, but non-potable without treatment; and Category 3 is unsuitable for most purposes. We plan to take the lessons learned from the completion of this first WAF at our Otjikoto operation and complete WAFs at additional operations in 2019. We also disclose our water management performance through the reporting of relevant water data (such as water withdrawal, discharges and water quality) in most jurisdictions to government regulatory authorities.

In order to ensure compliance with applicable standards and regulations and to ensure that our operations are not adversely affecting water resources, we monitor the quality of water that is discharged from our operations, as well as several surface water and groundwater parameters in the receiving environment surrounding our operations. In addition, several of our operations have monitoring teams for water quality control/assurance that incorporate external stakeholders (i.e. representatives from surrounding communities). These teams are mutually beneficial, helping B2Gold better understand stakeholder concerns while educating community members on B2Gold's water management practices and performance.

<sup>&</sup>lt;sup>9</sup> B2Gold does manage TSFs that do not have HDPE liners and were constructed prior to being acquired by B2Gold: one TSF at the Masbate operation does not have an HDPE liner, but was constructed with a compacted clay liner; three TSFs in Nicaragua, which have reached capacity and are in rehabilitation.

<sup>10</sup> https://www.icmm.com/en-gb/environment/water/water-reporting

#### **TABLE 7** | Consolidated Water Consumption ('OOO m<sup>3</sup>)

#### 2018 PERFORMANCE

Across our various sites, water is drawn from surface water and groundwater sources as well as precipitation onto, and run-off into, our facilities. Water is discharged to various receiving environments, including surface water and marine environments (at our Masbate operation), re-injection to groundwater (at our Otjikoto operation) and evaporative losses. Water is also entrained in our tailings facilities. As our operations are located across the world, each operating site has different challenges in measuring water abstraction or discharge depending on the supply and demand of the site.

Because our total water consumption can vary due to factors such as new mines, expansion projects and processing changes, in addition to measuring gross water use, we also report on our water use intensity. We calculate water intensity as the amount of water used per amount of rock mined – m³ per tonne (t). In recent years, all our sites have worked to improve our water use monitoring systems and practices (e.g. identifying flow streams, installing additional flow meters, improving data collection and management practices). As a next step in the continued improvement of our water management practices, in 2018, we piloted the implementation of a WAF at our Otjikoto Mine. The WAF comprehensively defines, measures and reports water use by inputs, outputs, diversions and water quality. In 2018 we have not applied water quality classifications to the various water abstraction and discharge flows within the Otjikoto WAF. We plan to do so in 2019.

In 2018, across all B2Gold operations, consolidated water withdrawn (excluding captured precipitation except at our Otjikoto Mine, where a WAF was completed in 2018 leading to more comprehensive water use information for external reporting) was 19.7 million m³, a slight reduction from 2017. In past years we have reported consolidated figures for water consumption and water intensity. However, having not completed WAFs at all of our operations, the reliability of consolidated consumption and intensity metrics for our operations is limited. Our water consumption intensity at our Otjikoto operation in 2018 was 0.08 m³ water consumed per tonne of rock mined.

	2016	2017	2018
Total Water Withdrawn	4,089	19,905	19,705
Surface water	1,524	5,440	2,744
Groundwater	2,562	14,429	16,356
Precipitation <sup>[1]</sup>	nr	nr	nr <sup>[1]</sup>
Municipal water	3	35	36
Other Supply	0.3	1.4	1.6
Total Water Consumed =Total Water Withdrawn - Total Water Discharged	nr	nr	nr
Total Water Recycled	nr	17,558	20,652
<b>Total Water Used</b> =Consumed + Recycled	nr	nr	nr
Percent Recycled	nr	nr	nr

#### NOTES

- » El Limon Mine did not report complete water use data in 2016, which contributes greatly to the reported change in groundwater withdrawal from 2016 to 2017 (i.e. El Limon Mine groundwater withdrawal in 2017 was approximately 10.6M m³).
- » Operations did not report recycled water volumes in 2016.
- » Operations did not report precipitation as part of water abstraction with the exception of Otjikoto for 2018 (see Table 9 and discussion in report). We are unable to report a reliable estimation of water consumption, water use, or percent water recycled without precipitation data. We are working to incorporate precipitation data into our water consumption data for additional sites in the future as discussed in this report.
- » <sup>[1]</sup> Precipitation data is reported for the Otjikoto Mine for 2018 (see Table 9); however, not for B2Gold as a whole.
- » nr = not reported

In 2019 and beyond we plan to use the WAF developed at our Otjikoto Mine and implement similar WAFs at other operations. This will allow us to continue to improve our understanding of and to mitigate site water risks, and will allow us to disclose better and more consistent water use information to our stakeholders regarding our water management performance. In addition, to address gaps and ensure conformance with our updated Water Management Performance Standard, our sites will implement action plans that include improvements based on reviews (including performance audits by external experts) of the design and management activities.





Destination	2016	2017	2018
Total Treated Water Discharge	2,985	6,247	6,288
Treated discharge by sewage treatment	38	80	86
Treated discharge to marine waters	2,820	4,810	4,652
Treated discharge to surface water	126	1,358	1,550
Total Untreated Water Discharge	0.7	11,351	12,352
Untreated discharge to sewers	0.7	1.4	0.2
Untreated discharge to surface water	0	11,349	12,349
Untreated discharge to groundwater	0	0	3
Total Discharge	2,985	17,598	18,640

#### NOTES

- » El Limon Mine did not report complete water use data in 2016, which contributes greatly to the reported change in untreated water discharge from 2016 to 2017 (i.e. El Limon Mine untreated water discharge in 2017 was approximately 10.5M m<sup>3</sup>; this is water that is dewatered from the underground mine).
- » Some sites discharge some domestic wastewater to municipal sewage systems or through septic up-flow anaerobic filter or similar treatment systems in line with relevant regulatory requirements; some of these discharges are measured and reported here while other discharges are not measured.

TABLE 9 | Otjikoto Water Consumption ('000 m³)

**TABLE 10** | Otjikoto Water Discharge by Destination ('000 m<sup>3</sup>)

2018

0

0

0

59

0.2 56

2.5

59

	2018	Destination
Total Water Withdrawn	3,015	Total Treated Water Discharge
Surface water	0	Treated discharge by sewage treatment
Groundwater	2,447	Treated discharge to marine waters
Precipitation	567	Treated discharge to surface water
Municipal water	0	Total Untreated Water Discharge
Other supply	0	Untreated discharge to sewers
Total Water Consumed	2,956	Untreated discharge to surface water
=Total Water Withdrawn - Total Water Discharged  Total Water Recycled  Total Water Used  =Consumed + Recycled	903 3,859	Untreated discharge to groundwater  Total Discharge
Percent Recycled	23%	

# ENERGY AND CLIMATE CHANGE

Our operations are energy intensive and use large amounts of diesel fuel and electric power. In addition to being among our largest expenditures, both of these energy sources emit greenhouse gases (GHG), which can trap heat in the atmosphere leading to a gradual increase in the earth's temperatures and changes in the global climate. We acknowledge this changing global climate and the fact that extreme weather events are a growing risk that require us to assess and build the resiliency of our business to a changing climate.

The key sources for direct GHG emissions at our operations are from electricity to operate our processing plants (from crushing and grinding, to leaching, electrowinning, and smelting) and the fuel for mobile equipment. Our Masbate, Otjikoto and Fekola operations generate 100% of their electricity on site via HFO power plants with diesel powered back-up. Our La Libertad and El Limon operations purchase their electricity from the national grid with diesel-powered back-up. Because our total energy consumption and GHG emissions can vary due to factors such as new or expanded mines, we report on our electricity intensity and GHG emissions intensity.

As part of our commitment to responsible mining and promoting renewable energy solutions at our operations, in early April 2018, our Otjikoto operation commissioned a 7 MW solar plant, converting its power plant to one of the first fully-autonomous hybrid (HFO and solar) power plants in the world. The solar plant allowed B2Gold to reduce fuel consumption and GHG emissions intensity at the Otjikoto Mine. The development of the Otjikoto solar facility reflects B2Gold's commitment to environmental stewardship and the Company's ongoing goal of reducing its dependence on fossil fuels in favour of cleaner, less expensive power sources. (See feature story on page 21.)

As reported for 2017, we began to develop our reporting processes for GHG emissions and planned to pilot our GHG emissions reporting practices in 2018. We completed our first GHG emissions inventory at our Otjikoto operation (emissions reported below) for Scope 1 (direct) emissions. The Otjikoto Mine does not purchase electricity from an external source and therefore does not generate Scope 2 (indirect) GHG emissions. We also estimated limited Scope 3 (indirect) emissions, including flights that we charter to transport workers and contractors to and from site and some contractor vehicles that operate off site. We calculated our GHG emissions using the GHG Protocol Corporate Accounting and Reporting Standard<sup>11</sup>:

- » SCOPE 1 (DIRECT): Direct emissions from owned or controlled sources. Our principal source of Scope 1 emissions is fuel consumption for site power generation and equipment/vehicle fleets.
- » SCOPE 2 (INDIRECT): Indirect emissions from the generation of purchased energy. The Otjikoto Mine does not purchase energy from an outside source and thus does not generate Scope 2 emissions.
- » SCOPE 3 (OTHER INDIRECT): Indirect emissions (not included in Scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. Sources of Scope 3 GHG emissions included some charter flights and bus services contracted to transport workers and contractors to and from site.

We were able to estimate our emissions in 2018 as well as 2017, based on historical hydrocarbon and other consumption/use records.

In 2019, we plan to extend our GHG emissions reporting to other operations and to estimate emissions in prior years. In addition, we are currently evaluating how to develop our climate change programs, with the planned focus being energy and GHG emissions inventories, strategies for reducing energy and emissions intensities, climate adaptation guidance and plans, and the inclusion of more information about our climate change approach in our annual reporting.

#### 2018 PERFORMANCE

Our total electricity consumption increased to 612 gigawatt hours (GWh) of electricity in 2018, consisting of 505 GWh of site-generated electricity and 107 GWh of grid-generated electricity. This was an increase of 185 GWh from 2017. In 2018, our electricity intensity rose slightly to 4.5 MWh/thousand tonnes of rock mined. from 4.4 in 2017.

As stated, we performed an assessment of and estimated our GHG emissions at our Otjikoto operation for both 2017 and 2018. We calculated our emissions using the GHG Protocol Corporate Accounting and Reporting Standard. Our total GHG emissions was unchanged from 2017 to 2018, at an estimated 126,000 tonnes CO<sub>2</sub>e (carbon dioxide equivalent). The two main sources of GHG emissions in 2018 are power generation (48% of emissions) and mine fleets (equipment and vehicles, 48% of emissions).

In this same period, from 2017 to 2018, the Otjikoto operation's GHG emissions intensity fell slightly from 3.6 to 3.5 tonnes  $\rm CO_2e/$  thousand tonnes of rock mined. This reduction in intensity is due in part to the installation of Otjikoto's solar power plant, commissioned in April as discussed above. Emissions from power generation fell over this time period as well, on both an absolute and proportional basis, from 69,000 to 61,000 tonnes  $\rm CO_2e$  and 55% to 48% of total estimated emissions. As the Otjikoto Mine continues to mature, production zones will tend to move deeper and further from material handling and processing infrastructure. This typically leads to increased emissions intensity, but our energy management effectiveness, including our solar power generation, should help us to mitigate increases in the years ahead.

In 2018, we used 104.1 million litres of HFO, 85.3 million litres of diesel fuel, 11,000 litres of gasoline, and 1.5 million litres of greases and lubricants.

**TABLE 11** | Total Electricity Consumption

Type of Consumption	UNITS	2017	2018
Total Electricity Consumption =Direct + Indirect	GWh	427	612
Direct Electricity Consumption (i.e. site-generated)	GWh	319	505
Direct non-renewable	GWh	319	494
Direct renewable	GWh	0	
Indirect Electricity Consumption (i.e. grid-generated)	GWh	108	107
Indirect non-renewable	GWh	108	107
Indirect renewable	GWh		0
Total Electricity Intensity	(MWh/thousand		

_					
TABLE	40	Otiikoto Mi	~~ CU	C Emia	
					5111115

Emissions	Units	2017	2018
Total GHG Emissions	thousand tonnes CO <sub>2</sub> e	126	126
Scope 1 Emissions	thousand tonnes CO <sub>2</sub> e	119	120
Scope 2 Emissions	thousand tonnes CO <sub>2</sub> e	0	0
Scope 3 Emissions*	thousand tonnes CO <sub>2</sub> e	7.2	5.8
Total GHG Emissions Intensity	tonnes CO <sub>2</sub> e / thousand tonnes rock mined	3.6	3.5

#### NOTES

<sup>11</sup> http://ghgprotocol.org/corporate-standard

<sup>\*</sup> Scope 3 emissions estimate is not comprehensive and only includes regularly-scheduled charter flights.



Through good conservation practices and sound land use we can not only avoid or mitigate negative impacts to biodiversity, but we can create significant opportunities to achieve positive impacts on biodiversity – also for neighbouring communities.

#### PROTECTED AND HIGH BIODIVERSITY AREAS

Protected areas include those protected by national or regional law or designated by international organizations, including United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Sites, and International Union for Conservation of Nature (IUCN) category Ia, Ib, II, III or IV protected areas. High biodiversity value areas have features that provide essential ecosystem services relied on by humans and animals, an abundance of rare, vulnerable or endemic species, and/or large areas of relatively intact natural habitat.

None of our operations (La Libertad, El Limon, Masbate, Otjikoto or Fekola) operate in or adjacent to identified protected areas as identified by international organizations or national legislation. There is a Marine Protected Area (MPA), protected by local ordinance, approximately 3.8 km from the causeway at our Masbate Mine. The MPA was implemented with the support of B2Gold's Masbate Mine.

Each of our operations have occurrences of species at risk within and/or adjacent to the operation. As reported in previous years, the species of higher conservation threat classification – i.e. categorized as IUCN Endangered (EN) or Critically Endangered (CR) - identified adjacent to our

operations are the West African chimpanzee (CR), hooded vulture (CR) and African lion (EN) at our Fekola Mine, and the hawksbill turtle (CR), golden-capped fruit bat (EN), horned helmet snail (EN), giant clam (EN), fire coral (EN), and spine coral (EN) at our Masbate Mine.

The presence of these threatened species adjacent to our Fekola and Masbate sites indicates that these are areas of high biodiversity value, which then directs the development of our biodiversity management for each operation.

All of our significant biodiversity management and conservation programs continued and/or expanded in 2018 Masbate continued with its support of the host municipality of Aroroy through expansion of mangrove reforestation projects, coral reef rehabilitation, biodiversity monitoring – all part of the implementation of the comprehensive Coastal Management Plan. In 2018, the Masbate team planted an additional 240,000 mangroves covering an additional 54 hectares. Since the program was initiated in 2013, we have planted just shy of one million mangroves, restoring approximately 220 hectares of mangrove forest. Over 400 fisherfolk directly benefit from this ongoing project. In addition, the team increased the number of Reef Balls placed within the local MPA from 120 to over 1,100, and transplanted an additional 3,000 corals. The MPA continues to be patrolled by the local wardens and the protection of the MPA, and the reef propagation efforts, are having a demonstrative positive impact on the diversity and biomass of the marine life inside and outside the protected area.

Our conservation efforts at our Fekola Mine, centred on the West African chimpanzee, continued in 2018. We developed our Biodiversity Strategy Framework which establishes the biodiversity management strategy, systems and actions for our operation to ensure success of our avoidance and mitigation efforts. The Strategy Framework established eight Strategic Conservation Action Areas for the implementation of mitigation measures:

- » Research, research partnership, internship, scholarship, and information dissemination
- Biodiversity management in protected areas
- Sustainable use of biodiversity components
- » Role of communities in biodiversity management
- » Institutional capacity
- Compliance with and enforcement of legislation
- » Management, coordination and monitoring

The Fekola team is currently working to update the existing Biodiversity Management Plan to incorporate additional information from the project (e.g. stakeholder input, new research and biodiversity data). Additional field study with external specialists to further define the chimpanzee (and other priority species) community size and range are also programmed for 2019.

We have also begun biodiversity-related programs in the surrounding communities. These programs have focused on raising awareness and improving biodiversity education, providing alternative sources of food and income, and engaging and recruiting individuals from each community to form part of our research efforts. These programs will continue and expand in the future as we continue to develop our biodiversity conservation programs.











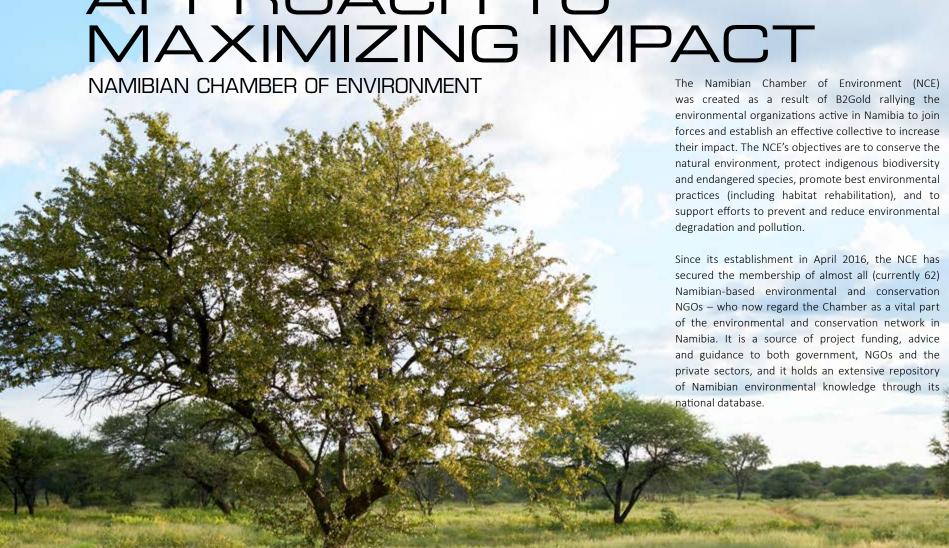












## SOME OF THE NCE PROGRAM AREAS INCLUDE:

- » Environmental policy research coordination of a policy research forum to identify and prioritize research;
- » Training and mentorship –establishment of an internship and bursary program;
- » National facilitation organization of conferences, symposia and workshops on topical environmental issues and research themes;
- » Awareness engaging regularly with government on development priorities;
- » Fund raising to support research and field work; and
- Environmental information building and managing Namibia's Environmental Information Service (www.the-eis.com).

B2Gold Namibia's CSR department has been operating since 2012 with environmental conservation as one of its focal areas. Other companies operating in Namibia were also investing in environmental conservation programs – in addition to the various NGO and government agencies. It became evident that a greater impact could be realized if these companies and organizations could collaborate and align their CSR programs for greater impact. The NCE was identified as the body to achieve this collaboration.

B2Gold encouraged other private sector entities – including the Namibian mining sector – to join the coalition of companies which now form part of the NCE membership. Together, they have devised a mechanism for jointly funding environment, conservation and community support initiatives.

Projects not only address biodiversity, but also consider sustainable development for people and their livelihoods — in particular when interacting with land, air, water, or wildlife.

B2Gold in Namibia has used its leverage to rally environmental organizations and industry to collaborate on environmental and social initiatives. Together their impact is having a multiplier effect.

# SOME EXAMPLE PROJECTS FUNDED THROUGH THIS COLLABORATIVE APPROACH INCLUDE:

## LOW-INCOME HOUSING IN URBAN AREAS:

In collaboration with the Ministry of Housing and the Ministry of Mines and Energy, the mining industry members of NCE are investing in two social development projects in non-mining areas: the provision of semi-serviced plots for the urban poor, and the electrification of a village in a remote conservancy.

#### WILDLIFE AND ANTI-POACHING:

The NCE has three ongoing projects for the protection of lion, leopard and cheetah, and has coordinated several anti-poaching initiatives ranging from rhino and pangolin protection to creating awareness of illegal logging.

#### PLASTICS CAMPAIGN:

The NCE is working with the Ministry of Environment and Tourism for better management of plastic use and waste.

## PROTECTION OF PILCHARD FISH STOCKS:

Pilchards, like sardines, are a keystone species and provide a foundation for much of the marine species pyramid. For many years they have been overfished which, in turn, has threatened other marine species. The NCE is working with the government to implement a three-year ban on pilchard fishing, initiated in 2018.

#### AIR SUPPORT:

A local aviation company (WestAir) has donated an aircraft, with maintenance support, to the NCE. It enables environmental organizations to carry out initiatives in remote regions of Namibia, such as coastal surveys, anti-poaching work, wetlands surveys, and carnivore tracking.

# WASTE MANAGEMENT

Responsible storage, handling and disposal of solid and hazardous waste are central components of sound environmental management. At our

operations, our practices are guided by our Non-Process Waste Management Performance Standard and are based on minimizing the generation of wastes and residues, reusing and recycling wastes or by-products, and, when materials cannot be recycled, disposing of them in an acceptable manner. Wastes are segregated, collected, transported, stored and disposed of or recycled according to established Waste Management Plans. All materials are recycled or disposed of in accordance with all relevant in-country statutory obligations, licences and other requirements.

Non-hazardous waste at our sites typically consists of scrap metal, wood waste, glass, tires, cardboard and paper. The primary hazardous waste produced at our operations include waste oil, solvents, anti-freeze, paint, batteries and fluorescent tubes.

Waste rock management is a key environmental aspect of our operations. Depending on the characteristics of the waste rock, appropriate waste rock management facility design and management procedures are developed as required by our Waste

Rock Management Performance Standard (updated in 2018). Sites are required to address potential surface water and groundwater quality impacts and to design, construct, operate and close waste rock storage facilities in ways that provide long-term protection of stakeholders' health and safety and the surrounding environment.

Our Masbate operation is our only site that generates significant quantities of potentially acid generating materials. Comprehensive management strategies for these materials were first developed with expert consultants. Utilizing these management strategies, we have now constructed three waste rock storage facilities (i.e. Bangon, Syndicate and HMBE) that contain potentially acid generating materials and with each new facility we are able to improve upon the practices and measures for mitigating the generation of acidic drainage (e.g. identification and segregation,

Mining and processing gold produce waste

by-products in the form of tailings and waste

rock, as well as some non-hazardous and

hazardous materials. These wastes, as well

as the process for storing and transporting it,

can pose environmental and public health risks.

Effectively managing wastes and ensuring its

safe storage and transportation is critical to

protecting people and the environment.

dumping procedures to reduce air convection, and encapsulation with acid neutralizing materials). Additional information regarding the rehabilitation of our waste rock storage facilities at our Masbate operation can be found in the feature story on page 91. Our extensive monitoring programs, including such measures as

surface water and groundwater sampling and investigations of waste rock cover performance, continue to confirm that the measures employed are working to ensure that potential impacts to the receiving environment remain at acceptable levels.

Our Tailings Management Performance Standard requires sites to perform baseline investigations and assess potential impacts prior to the placement of tailings: to design, construct, operate and close facilities to be geotechnically and geochemically stable, and to be protective of human life and the environment. We use retention dams and raised embankments to store and manage tailings. We do not dispose of any tailings in riverine systems or marine environments.

We employ several tiers of monitoring and inspection of all of our tailings facilities. We implement rigorous construction QAQC controls during dam construction and embankment raises, conducted by independent experts. Our personnel perform daily

and other periodic operational inspections, and we perform annual facility inspections by the Engineer of Record (i.e. by independent experts). All of our tailings facilities underwent independent annual inspections in 2018. In addition, with the review and update of all of our HSE policies and standards that we conducted in 2018, significant additional requirements were added regarding our tailings management practices. We now require that all of our tailings dams and tailings management practices undergo a comprehensive third party review at least every five years. This aligns our requirements with changes made to accepted industry practices in the past several years, in light of several unfortunate failures within the industry. In 2019 we will fully implement this new requirement for third party review by creating additional internal guidance and conducting our first review under these new requirements at our Masbate operation.

B2Gold generated 110 million tonnes of waste rock and 18.7 million tonnes of tailings in 2018, an increase of 47% and 31% respectively, compared to an overall increase in annual consolidated gold production of 51%. Much of the year-on-year increase corresponds to the full year of production from the Fekola Mine (compared to partial year production in 2017).

ALL OF OUR TAILINGS FACILITIES UNDERWENT INDEPENDENT ANNUAL INSPECTIONS IN 2018.

In 2018, we generated more waste (mineral and non-mineral) in almost every category, due in large part to the full year of operation at our Fekola Mine. However, our global output of both non-mineral hazardous and non-hazardous waste can vary due to activities such as maintenance requirements and construction activities.

#### **TABLE 13** | Waste Produced

Type of Waste	Units	2016	2017	2018
Total Waste Rock*	Thousand tonnes	50,888	75,047	110,178
Total Tailings	Thousand tonnes	13,135	14,271	18,705
Total Non-Mineral Waste**	t	2,709	6,570	8,934
Total Hazardous Waste	t	1,415	2,554	3,262
Waste oil	t	934	1,334	1,433
Hydrocarbon impregnated materials	t	451	657	553
Total Non-Hazardous Waste * *	t	1,294	4,016	5,672
Total Non-Hazardous Waste Recycled**	t	851	2,932	3,834

#### NOTES

- \* 2016 data excludes El Limon Mine open pit waste tonnage.
- \*\* 2016 data excludes Masbate Mine recycled scrap metal tonnage.

We generated approximately 8,900 tonnes of non-mineral hazardous and non-hazardous waste, consisting of approximately 3,300 tonnes of hazardous waste and 5,700 tonnes of non-hazardous waste. We were also able to recycle more materials than in years past. In 2018, we diverted over 3,800 tonnes of non-hazardous materials (the bulk of which is scrap metal, followed by paper/wood products) from landfills, and recycled over 1,400 tonnes of waste oil. We continue to work to reduce our overall waste generation and for waste that we do generate, to target materials that we can re-use or recycle to reduce the potential for impacts to the environment.

# CYANIDE MANAGEMENT

Sodium cyanide is an essential chemical in the processing of gold ore as, currently, the cyanidation process is the most effective, economical and safest metallurgical technique to recover gold. Due to the fact that cyanide can pose serious health risks to humans, animals and plant life, the right to health has been identified as a potential salient human rights issue associated with the gold mining industry.

Guiding our approach to transport, storage, use and disposal of cyanide is our Cyanide Management Performance Standard (updated in 2018). Our Standard is based on the nine principles of the International Cyanide Management Code, and we require that our operational practices and performance are in accordance with the Cyanide Code. We audit our sites against our Cyanide Standard through independent expert auditors.

We use cyanide destruction processes at our Masbate, Otjikoto and Fekola operations prior to deposition of tailings slurries to TSFs.

Tailings slurries at our Otjikoto and Fekola operations are deposited (within TSFs) with WAD cyanide target concentrations below 10 parts per million (ppm). The La Libertad, El Limon and Masbate operations have tailings slurry deposition WAD cyanide target concentrations of below 50 ppm. Although these operations deposit tailings with a slightly higher WAD cyanide concentration, concentrations within process ponds are typically much lower due to volatilization, degradation from ultraviolet light, and dilution from direct precipitation. Thus, all our operations are able to maintain WAD cyanide concentrations within process ponds (including TSFs) well below the 50 ppm Cyanide Code guideline protective of wildlife.

In 2018, our operations used 9,674 tonnes of sodium cyanide. Quantities vary each year due to mineral variations in our ore bodies as well as processing variables. The increase in use compared to 2017 is due mostly to the full year of production at our Fekola Mine in 2018. We continued work during the year to improve our cyanide management performance and to evaluate opportunities to minimize cyanide use.

In 2018, we had two cyanide-related incidents (both releases) that were rated as significant. Details of these two incidents are presented on page 39.

 TABLE 14 | Material Usage

Material	Units	2017	2018
Cyanide (CN)	t	7,171	9,674
Greases/Lubricants	kL	1,234	1,526
Diesel	kL	66,540	85,273
Gasoline	kL	22	11
Heavy Fuel Oil	kL	66,803	104,111

# COMPLIANCE AND ENVIRONMENTAL INCIDENTS



#### **COMPLIANCE**

We are committed to complying with all environmental laws, regulations and permit requirements of the jurisdictions where we operate. Our approach to managing legal compliance is guided by our Legal Obligations and Evaluation Compliance Management System Standard (updated in 2018). This standard sets our minimum requirements guidance at our operations to ensure that we have formal processes and systems in place to identify and manage our statutory obligations with respect to the various national, provincial/state and local/municipal laws, regulations, rules and other HSE obligations that apply to our operations.

WE TRACK OUR COMPLIANCE THROUGH LEGAL AND PERMIT REGISTERS, INSPECTIONS AND AUDITS, AND ENVIRONMENTAL MONITORING.

We track our compliance through legal and permit registers, inspections and audits, and environmental monitoring. In addition, we investigate and track environmental incidents to understand root causes of events – to aid in the development of mitigation strategies, and to avoid having repeat events.

In 2018, we received a notice of violation at our El Limon operation for discharge from the underground mine that did not meet applicable effluent standards. Groundwater at our Santa Pancha mine is geothermally heated and we must dewater large volumes of water to be able to access the mine ore body. At times the discharge of this water exceeds the effluent temperature standard and at times the discharge has also exceeded the total suspended solids effluent standard. This flow is not discharged directly to any waterway, and when it does reach a waterway, the water temperature is within standards. No negative impacts from this discharge have been observed. Nevertheless, we are working on the installation of a cooling tower system and improved sediment deposition to bring this discharge permanently into compliance with all standards.

B2Gold's internal HSE Management System Standards (updated in 2018) are aligned with ISO, Occupational Health and Safety Assessment Series (OHSAS) and other international best practice standards. The Philippines government has required since April 2016 that all metals mining operations in the country acquire and maintain ISO 14001 certification to help ensure that local mining operations improve their environmental performance and adhere to international standards. Our Masbate Mine has maintained ISO 14001 certification since March 2016, receiving its re-certification to the updated ISO 14001:2015 in March 2018 and maintains strong environmental management systems in accordance with international standards.

#### **ENVIRONMENTAL INCIDENTS**

An incident is an unintended event that, in the vast majority of cases, is immediately managed and has *de minimis* environmental implications. All of our operations have control measures in place to minimize the likelihood of environmental incidents and to mitigate potential effects on the environment for those incidents that do occur. Control measures include facility design considerations, spill containment measures, meters, alarms, standard operating procedures, training, regular inspections, and the identification of potential issues through internal risk assessments. Significant environmental incidents are investigated to identify the root causes, and we implement remedial measures and corrective actions.

B2Gold employs a basic classification system for severity of environmental incidents. We classify environmental incidents as either minor or significant according to the event's potential threat to the environment (particularly to receptor water bodies). whether or not an environmental incident results in off-site impacts (e.g. a spill leaving the operation boundary), whether it is required to be reported to regulatory authorities, or whether there are other statutory considerations. We recorded five significant environmental events in 2018. However, while reported here as significant as per the criteria of our internal classification system, these incidents did not result in any widespread or long-term impacts; these five incidents were moderate in their severity. We recognize that our internal classification is simplified (only provides two levels of classification) and does not align with industry classifications (which typically provides three to five levels of classification). In the future, we may look at refining our classification system for environmental incidents to provide additional clarification of the severity of incidents. The five environmental incidents are described as follows:

- Two cyanide-related spills were at our Masbate operation. One incident occurred in which a pond overflowed and process water containing cyanide reached a waterway, resulting in a small number of fish (approximately 15) dying, resulting in no long-term impacts. The second incident involved discharge of approximately 3,000 m³ from our site Water Treatment Plant at a WAD cyanide concentration slightly above the effluent standard. No negative impacts on the receiving environment were observed.
- » Two hydrocarbon spills occurred at our Otjikoto and Fekola operations and did not lead to negative impacts to the receiving environment, but were in this category as one occurred off-site and one was of a reportable quantity.
- » One non-spill incident occurred at our Otjikoto operation. A wildlife fatality occurred when a pangolin was struck by a vehicle. Pangolins are a protected species in Namibia and are listed as Vulnerable by the IUCN.

All spills and other environmental incidents, of any magnitude, are immediately reported, cleaned up (or otherwise corrected), and investigated to determine the cause of the incident, to ensure that corrective actions are implemented to reduce the likelihood of similar incidents in future







### APPROACH TO PEOPLE MANAGEMENT

People can benefit greatly from the social and We recognize that our accomplishments as a economic impacts of a mining project when company are possible through the accomplishments measured in terms of employment, capacity of our people. As reputable employers, we generate building and income generation. Globally, the opportunities for people to develop their careers, formal mining sector employs and provides train employees to acquire new skills, and open doors skills-transfer to between two and four million to women, minorities and historically disadvantaged people. When considering the indirect impacts, people. Investing in our people attracts talented the social and economic benefits are expanded individuals and grants them the dignity to provide by a multiplier factor of between two to five<sup>12</sup>. for themselves and their families.

To achieve these objectives, B2Gold is guided by our corporate Approach to People Management Policy that defines our Company principles regarding our people and our workplace. Each operation subsequently develops localized policies, programs and plans that are best suited to each of the national settings. Through employee engagement forums, feedback from employee-based committees, and results from workplace grievance mechanisms, we update our approaches to people and workplace to better achieve our objectives.

The Approach to People Management Policy, first implemented in 2017 and updated in 2018, considers international best practices, relevant International Labour Organization (ILO) Conventions, and human rights frameworks. Commitment and adherence to this corporate standard is significant and will be measured as a key performance indicator at country management level. Our approach aligns with and is complementary to our codes of conduct, and policies and performance standards on health and safety and social responsibility. Our people are also guided by our Code of Business Conduct and Ethics, Anti-Corruption Policy, Whistleblower Policy, Disclosure, Confidentiality and Insider Trading Policy, and Employee Confidentiality Policy.

In addition to establishing a foundation for a decent and safe workplace, our principles prohibit forced and child labour. B2Gold will not employ any person under 18 years of age. Our respect for people's freedom of movement ensures that employees have the right to retain their personal documents and assets, to leave the workplace after work, and to resign at their own free will.

At the end of 2018, our employees totaled 5,24213, including 3,512 direct employees and 1,730 supervised labour employees.

#### PEER SUPPORT

#### WELLNESS IN THE WORKPLACE

In 2015, a Peer Education Program was launched in Namibia. Peer Educators are employees nominated (or who volunteer) to assist with the implementation of wellness and other workplace programs, as employees tend to be more at ease discussing personal or health issues with peers or people they perceive to be like themselves. Peer Educators:

- assist with the roll-out of Wellness and HIV/AIDS workplace programs;
- impart basic knowledge about HIV/AIDS and other relevant issues to fellow employees:
- encourage participation in all facets of a company's wellness program;
- refer colleagues to appropriate service providers where necessary; and
- reduce stigma associated with HIV/AIDS. Currently there are 49 Peer Educators at our Namibian operation, and are trained under the Family Health International Program that delivers a standardized approach to workplace-based HIV/AIDS education. Peer Educators themselves undergo processes of change and growth during their training with respect to their own sexual knowledge, behaviour and general life skills.

<sup>12</sup> Economic Impact of World Mining, World Bank Group Mining Department, Washington, D.C., USA

<sup>&</sup>lt;sup>13</sup> Employee total includes supervised contracted labour but does not include unsupervised contractor employees. The reported numbers include full-time and part-time permanent employees as well as temporary employees.

### LOCAL EMPLOYMENT

Our commitment to local employment is prioritized in our Approach to People Management Policy and is guided by our Local Content Standard, which promotes strategies to enhance local employment. Our local employment objectives address the demographics and empowerment initiatives of the respective national settings, while embedding our inclusive culture to attract talent from around the world. We are proud of the richness in diversity of our workforce; our people value working in a multi-cultural setting and the work experiences it provides.

We continue to maintain a high local employment rate by targeting recruitment efforts at local or national levels. Across all operations, 97% (up from 96% in 2017) of the total workforce are local employees. Regional breakdowns of local employment statistics are detailed in Table 17.

Where we operate abroad, 71% of Senior Management is hired locally (77% in 2017). The decrease is a result of the Fekola Mine having come into operation for the full year of 2018. Currently the Fekola management team is mostly expatriate while we develop the mine's operational departments. Once these are fully established, management roles will be filled by local personnel who are being prepared for these responsibilities. "Senior management" refers to regional executives and regional heads of departments. "Local" is defined for individuals either born in the same country of operation, or those who have the legal right to reside indefinitely in that country.

At our Fekola Mine in Mali, employment for unskilled roles gives preference to neighbouring communities. Anticipating that the transition from construction to operations in 2018 would reduce the number of employment positions overall, we managed to reach higher local employment levels at the operations phase targeting two main initiatives. Firstly, we transitioned

# AFECK MEETING THE NEEDS OF THE LABOUR MARKET

The Adéquation Formation-Emploi dans le Cèrcle de Kéniéba (AFECK) project is a "Skills for Employment" initiative co-funded by Global Affairs Canada and by B2Gold (75% and 25% respectively), and implemented by Cowater-Sogema (an international development organization).

The objectives of the AFECK project are to improve technical skills for Kéniéba Cèrcle residents to meet the needs of the labour market and to increase the capacity of small businesses, with a focus on female entrepreneurs – enabling them to provide goods and services to the extractive and other sectors. AFECK will also support the local government to improve delivery of vocational skills and training programs.

From early 2017 to end of 2018, 410 people from the Kéniéba Cèrcle have received vocational training. The courses included skills such as masonry, painting, roofing, plastering, formwork, photovoltaic electricity and entrepreneurial skills. Approximately 50% of these have been formally hired on construction contracts. Entrepreneurial and small business training has been delivered directly to 333 people, with a further 437 people receiving training from their peers using the same training curriculum. Of these 770 direct and indirect trained beneficiaries, approximately 44% are either employed or self-employed in small business activities. AFECK has also helped initiate seven agricultural cooperatives including three women's cooperatives.

14 "Previously disadvantaged persons" means persons contemplated in Article 23(2) of the Namibian Constitution and includes: (a) racially disadvantaged persons; (b) women; and (c) persons with any disability as defined in the National Disability Council Act, Act 26 of 2004; "racially disadvantaged persons" means all persons who belong to a racial or ethnic group which was or is, directly or indirectly, disadvantaged in the labour field as a consequence of social, economic, or educational imbalances arising out of racially discriminatory laws or practices before the independence of Namibia, as per Affirmative Action (Employment) Act, Act 29 of 1998.

over 80% of the Malian staff from construction to operations through mentoring, formal and on-the-job training, and job rotation to find best job fit for the individual. Secondly, we are leveraging the AFECK project to upgrade the skills of job seekers in the local community and to develop local-business supply opportunities. (See story on this page.)

Local employment levels for our Nicaraguan operations exceed those required by law. Advanced and senior roles are typically filled through internal promotion which increases opportunities for local senior management. Investment in skills training, bursaries, and job rotation allow us to achieve our high local employment rates across the Nicaraguan workforce.

In the Philippines, our employment practices give preference to residents of Masbate province in compliance with the Philippine Mining Act and local government unit requirements. B2Gold initiated the establishment of an Industry Tripartite Council (ITC) among the 13 contractors of our Masbate operation to provide a forum to address local employment objectives and other workplace issues.

In Namibia, B2Gold's approach to local employment focuses on recruiting individuals from designated groups, as set out in the country's Affirmative Action (Employment) Act. Preference is given to previously disadvantaged Namibians<sup>14</sup>. B2Gold Namibia supports the redress of imbalance in the workplace arising from the discriminatory socio-economic dispensation which historically had prevailed in the country, by way of implementing employment equity principles and affirmative action measures. Our Affirmative Action Plan has produced a workforce which is 95% Namibian from historically disadvantaged groups. Only 1.5% of the total workforce is non-Namibian. The positions of non-Namibian employees all have Namibian understudies. The number of historically disadvantaged employees at middle and senior management levels is 55%. We recognize this is an area needing improvement and we have identified measures that will enable us to address this statistic in 2019.





# DIVERSITY AND EQUAL OPPORTUNITY

B2Gold values diversity and strives to eliminate employment barriers that interfere with the establishment of equal opportunities. Employment decisions are based on the inherent nature of the job and not on personal characteristics or circumstances that are unrelated to the execution of work. Race, ethnicity, religion, gender, age, physical or mental disability are not considered when assessing one's employability unless: it directly relates to affirmative action legislation calling for preferential treatment; legislation limits the access of women to certain jobs (e.g. laws prohibiting women to work at night); a disability impacts ability to perform a task and is regarded as a safety risk for the individual and others; or minimum age is an issue.

While we are proud of the diversity of race and culture among our people, only 13% of our total workforce is female, with 22% of senior positions occupied by women (levels were similar in 2017). These senior positions include occupations of a specialized or professional nature as well as superintendent, middle, and senior management positions.

In 2018, we delivered a gender diversity sensitization workshop to our global senior management to prepare them for the opportunities and challenges we will encounter in tackling real and perceived barriers to gender diversity. A scope of work and budget was approved allowing us to launch our Corporate Gender Diversity initiative in 2019 which includes formalizing a corporate Gender Diversity Strategy and working with a consultant to identify organizational barriers. We recognize that it takes a long-term commitment in order to reach our objectives for improved gender diversity.

In parallel to the development of a corporate initiative, our regional teams began embedding gender priorities in their policies and programs. Some of these are presented in the examples below:

- » In the Philippines, B2Gold raised awareness by showcasing current women in mining roles such as geologists, scuba divers, environmentalists, mine engineers, metallurgists, processing plant supervisors, heavy equipment operators, surveyors, and drill and blast technicians.
- » In Namibia, the B2Gold Otjikoto Women in Mining (WIM-Otjikoto) Committee was established. The main objectives of WIM-Otjikoto and the Women in Mining Association Namibia (WiMAN) are to retain and attract women to the industry, to share women's challenges within the industry as well as responses to those challenges offered by different mining houses and disciplines, and for women within the industry to support each other.
- » In Namibia, one of our female employees directed an anti-gender-based violence campaign as part of the country's national Gender Equality program. (See story on page 45.)
- » In Mali, gender targets were incorporated into the Scholarship program and in the AFECK project. (See story on page 43.)

# ENDING CYCLES OF VIOLENCE IN NAMIBIA

The #BreakFree Campaign

"TO HAVE PEACE IN OUR SOCIETY, WE MUST START WITH OURSELVES. ERADICATING VIOLENCE REQUIRES SOCIAL CHANGE. IF EACH ONE OF US DO OUR PART, BY SIGNING THIS PLEDGE, OTHERS WILL OBSERVE THE CHOICES THAT WE MAKE AND WILL FOLLOW OUR LEAD."



These thoughts come from Natalia Haulofu, an Accountant working in the B2Gold Namibia Finance department. Community work is one of her passions. In late 2017, the office of Namibia's First Lady, Madam Monica Geingos, launched the #BreakFree Anti-Violence Campaign. Due to Natalia's interest in social issues, she became involved and has lead the roll-out of the #BreakFree Campaign within B2Gold Namibia.

Based on research into the causes of violence in Namibian society, Madam Geingos used these learnings to launch the #BreakFree Campaign — with the objective of mobilizing national support to end cycles of violence within Namibian communities. The first phase of the campaign involved a country-wide road show which encouraged Namibians to sign a pledge, committing themselves to become part of the solution to end violence. The campaign sought to obtain 100,000 signatures before the end of 2018.

B2Gold felt that it was imperative to support this drive — which at the same time could contribute to the well-being of all employees, stakeholders and their families at large. B2Gold's adoption of the campaign included the signing of the 12-point anti-violence pledge, as well as focus group discussions within the company on the causes and impacts of violence. These activities took place over a week-long period and included campaign organizers who facilitated the discussions and pledge-signing. By the end of the campaign, the entire B2Gold Namibia workforce had pledged to "be part of the solution."

The next phase of the #BreakFree Campaign is planned for the second quarter of 2019. Natalia is adamant that the initiative continues until we begin to see a change in our society.

While we are focusing on how to increase the number of women at all operations and across all levels of employment, we also need to ensure equal pay is applied for work of equal value. In the unionized environment, which typically includes unskilled to skilled levels, pay equity is greater since pay levels are governed by collective bargaining agreements or set within pay grades. At these levels, the overall basic salary pay ratio<sup>15</sup> is 0.97 and remuneration is 0.93. The remuneration ratio is influenced by more overtime worked (and thus earned) by men. At the supervisory and professional level, the overall ratio is 0.98 and 0.95, for basic salary and remuneration respectively. At managerial levels there are issues that arise due to the subjectivity of determining pay. Even when pay scales are available, salaries are set based on previous years of experience, compensation at previous employers, scarce skills, and a candidate's negotiation abilities. While we work towards equalizing pay levels over time, we need to find ways to address this subjectivity. At the managerial level, the basic salary ratio is 0.85 and remuneration ratio is 0.78.

Diverse representation exists at all levels within B2Gold, namely on employee committees, management committees and governance committees.

In 2019, B2Gold plans to advance our objectives towards diversity and equal opportunity through the development of our Corporate Gender Diversity Plan. Surveys on diversity will also be conducted at each of our mines by an external consultant to understand potential barriers, identify gaps in policy, and to determine strategies and action plans to achieve an increase in female representation and other diversity objectives.

<sup>&</sup>lt;sup>15</sup> Gender pay gap ratio is calculated as the average difference between the remuneration for men and women.

## Employee » Committees

- » In Nicaragua, the Union committees represent their respective employment groups. The committees have no female members.
- » In the Philippines, skilled to professional level employees engage with the Company via the Employee Engagement Committee. Diverse age groups are well represented and approximately 30% of the membership is female.
- » In Namibia, both the Union's Branch Executive Committee (BEC), as well as the Affirmative Action Committee members are elected by employees. Both of these committees represent the applicable employment categories, all types of positions and age groups, and both of the committees have female members. The Affirmative Action Committee has 11 members: two are female and 10 are historically disadvantaged. The BEC has eight members: one is female and all are historically disadvantaged.
- » In Mali, staff representative bodies consist of 36 nationals from the unskilled to supervisory categories. All age groups and technical and administrative categories are well represented. No females have been elected by employees at this time.
- » Various committees that represent staff have an overall female membership of 18%; 20% of all members are below 30 years of age, 73% between 30 and 50 years old, and 7% are above 50.

# Management » Governance Bodies »

- The local Fekola management representative body is mostly in the 30 to 50 age group and have no local female members.
- In Namibia, the nine-member management team has one female and three members are Namibian. The operations management team has 11 members: two are female, 10 are nationals and six are historically disadvantaged. Age groups are well represented in both these teams.
- » The management committees in Nicaragua have 36% females. The majority of committee members are nationals.
- » The management team in the Philippines represent all age groups, is 83% local, and has 24% female representation.
- » The 14-member corporate management team has one female; most are above 50 years of age.
- » Management teams across the Company have a 21% female representation; 67% of these team members fall in the 30 to 50 age group, with the balance being over 50 years of age.

# Corporate » Team and Board of Directors »

- The eight-member Corporate Board of Directors has one female nonexecutive director, only one member who is also an employee, and an average age of 62.
- » The six-member Board of Directors in the Philippines has one female.
- » The seven-member Namibian Board of Directors has no female members; two of the seven are historically disadvantaged.

#### WORKPLACE GRIEVANCE MANAGEMENT

As stipulated in our corporate Code of Business Conduct and Ethics, Human Rights Performance Standard, Approach to People Management Policy, and in our regional human resources (HR) guidance policies, discrimination or harassment of any kind is not tolerated. Grievance mechanisms have been implemented in all regions. Grievance procedures are customized to the region and are accessible to all employees who need to report unacceptable treatment or behaviour. Grievances are handled in a confidential manner and without retribution. The Company's grievance mechanism will be extended to supervised labour employees, should they not have access to one.

In 2018, 17 workplace grievances were lodged (total for all operations) of which 13 have been successfully addressed at the time of this report. The grievances related to enquiries on recruitment, work hours, compensatory and disciplinary matters.

Although no formal grievances were lodged related to workplace harassment, B2Gold recognizes that this is a sensitive aspect for any workplace. In the Code of Business Conduct and Ethics, which applies to all employees globally, B2Gold is firm in its zero-tolerance stance towards harassment and encourages employees to report any situations in which they feel they have been harassed. The policy is enforced at the regional level through local harassment policies, internal regulations, grievance mechanisms and/or regional codes of conduct. In 2018, Namibia initiated an annual Sexual Harassment Awareness Program to support our objectives for an inclusive and diverse workplace. In the Philippines, an Off-Duty Misconduct and Non-Work-Related Incident Policy was developed in 2018 to address expectations of off-duty conduct and avoidance of off-duty harassment, which included respect for personal privacy.

Although no formal grievance was lodged related to discrimination, B2Gold Namibia experienced one demonstration in 2018 which included the presentation of a letter alleging unfair treatment by management. The demonstration was peaceful and took place before working hours.

In 2019, we plan to review our grievance mechanisms to ensure that they are legitimate, accessible, predictable, equitable, transparent, rights-compatible, and a source of continuous learning. Workplace harassment policies at all sites will be part of this review.



with regards to notice periods, which are typically four weeks. Since this is legislated, these notice periods are not included in collective bargaining agreements.

B2Gold did not experience any strikes in 2018. At some of our sites we faced employee and community-based concerns regarding employment relations. In Nicaragua, we addressed community demands for additional employment opportunities and intervened regarding labour issues related to a contractor (see story on this page for the positive outcomes of B2Gold/Union relations). In Namibia, our management team addressed a union-led petition alleging unfair treatment by management. The management team and the BEC managed to resolve the alleged matters amicably. As a result of regular engagement with union and staff representatives at all sites in Nicaragua and Namibia, B2Gold has been able to handle emerging labour issues in a proactive, productive and positive manner.

#### RETAINING TALENT

Some of our mines are located in isolated, rural locations which make it challenging to hire locally, attract qualified people (specifically women), and retain talent. These barriers are increased by the lack of, and need for, suitable accommodation, limited public services and long fly-in fly-out rosters. These challenges are mitigated by offering good compensation and benefits, implementing motivational training and wellness initiatives, and committing to our principles outlined in this report. Sixty percent of employees are permanently employed.

Our voluntary turnover remains low at 4.9% (was 4.4% in 2017). Turnover rates have been low for several years which we attribute to our efforts in employee engagement, training and development, wellness in the workplace, and other initiatives. Our involuntary turnover rate is not indicative since it is distorted by the employment changes of the newly commissioned Fekola Mine: multiple contracts were terminated and initiated as roles transitioned from construction to operations phase.

#### MINEWORKERS' UNIONS AND B2GOLD

#### AN ALLIANCE THAT BENEFITS ALL

B2Gold has 1,104 direct employees in Nicaragua. Of these, 98% are Nicaraguan, over 86% are from the communities around the mines, and 76% are unionized. B2Gold and union representatives at La Libertad and El Limon mines have established effective means of communication, resulting in operational stability that benefits the company, its workers and communities. Representatives of the three mineworkers' unions at El Limon Mine meet with B2Gold management on a regular basis to assess labour-related issues, as well as the mine's major objectives and challenges.

"It's a relationship of trust, enabling us to discuss and resolve any labour issues that might arise," said Rito Calderón, Secretary General of the Democratic Union of Mining Industry Workers.

At La Libertad, effective communication between management, workers and their union representatives have also resulted in strong, long-lasting relations — evidenced by the fact that there have been no strikes or work stoppages since operations initiated under B2Gold in 2010. As a result of these positive labour environments, B2Gold and unions at both mines signed collective agreements that will remain in effect until 2020.

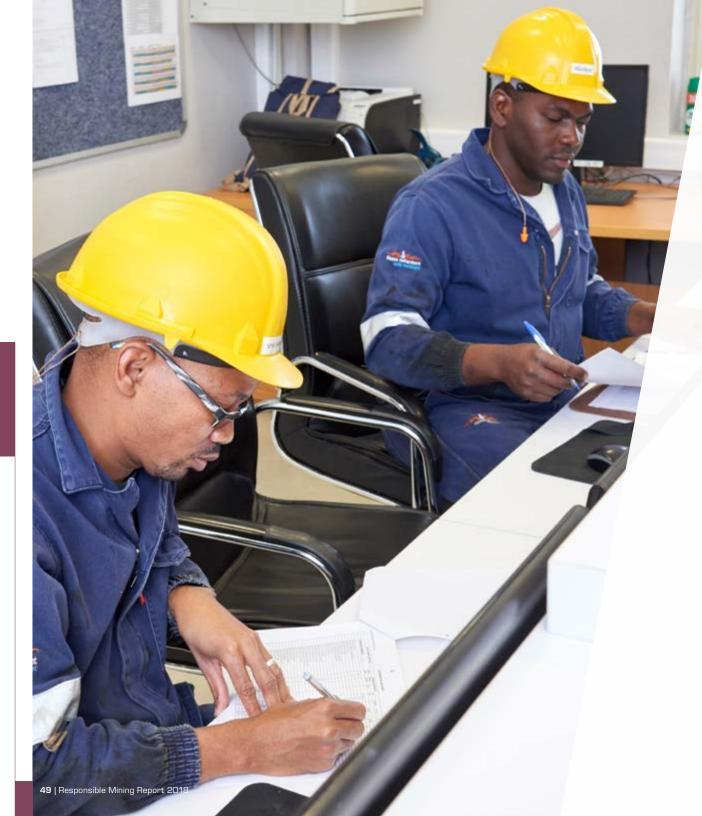
Since our people work in wide-ranging locations around the world, wages and benefit policies can vary to some extent. Wages and benefits are reviewed on a regional basis in terms of legislation, collective agreements and type of employment contracts. The respective operations have varying degrees of medical, disability, life, retirement and parental leave benefits. Where available in the market, our operations participate in local salary surveys for benchmarking purposes and to enable us to continue to attract talented individuals to work with us.

#### MANAGING CONTRACTOR RELATIONS

Many, but not all, of our policies and performance standards have been extended into our supply chain. In order to further extend our performance standards, in 2018 we developed a Supply Chain Code of Conduct (see page 23) which will be implemented in 2019. Sixty-seven percent of employees are directly employed, while the remaining are subcontracted.

At our Fekola Mine, the recent transition to operational phase required an assessment of our new labour requirements. On an interim basis, the Fekola operation uses labour outsourcing to facilitate this transition. In order to manage the risks associated with outsourcing, our Fekola HR team retains the lead on all HR processes from recruitment to termination. They are also fully involved in time-and-attendance tracking, salary level and payment verification, grievance mechanisms and internal conflict resolution, health and safety policy implementation, training and communication. Management believes this oversight to be the best way to ensure alignment and to focus on delivering and executing the agreed scope of work, while adhering to our employment and workplace standards and Human Rights principles. In 2019, we expect to apply our recently developed Supplier Code of Conduct to this arrangement. Management will continue monitoring this contractual relationship to ensure it remains effective.

At our Masbate Mine, law prohibits labour-only contracting. Our Masbate management team has worked continually with local contractors to ensure they remain compliant with contract requirements, ensure contractor employees are paid appropriately, and that mandated government payments are completed. HR, as part of its due diligence, regularly conducts labour law and social welfare benefits compliance inspection of all Masbate contractors and works to immediately address issues and concerns. Our Masbate HR team initiated the establishment of an Industry Tripartite Council among the 13 contractors of our Masbate operation, providing a forum for multilateral communication and consultation, empowering contractors and employees, enhancing their respective rights, attaining industrial peace, and improving productivity. Open-line communication is also extended directly to all contractor employees to address employment-related issues and concerns.



Supply chain management is a focus area for B2Gold, as we extend our performance principles to other suppliers and implement our Supplier Code of Conduct (see page 23).

#### TRAINING, EDUCATION AND DEVELOPMENT

Our Approach to People Management Policy outlines B2Gold's commitment to invest in our people through training and professional development, performance management, workplace initiatives and opportunities for career advancement.

In 2018, B2Gold continued to invest in management, technical and non-technical training across our regions. Each region maintains Individual Development Plans, ensuring competency levels are up to date and meet company standards as well as job role requirements. Employees attended various training programs and interventions relevant to their areas of discipline. Some regions focused on junior to middle management skills development and included training such as supervisory, employee relations and leadership interventions. Other regions addressed training specific for miningrelated skills to meet our employment needs. B2Gold uses mentorship, job rotation and other activities to broaden the skills and experiences of key individuals. In addition to the above, the Company provided workplace opportunities for interns from vocational training centres and tertiary institutions to gain experience in their fields of study. B2Gold identified the need to improve leadership-related skills for supervisory and management levels. Plans will be considered during 2019.

An essential aspect of attracting and retaining talent is the opportunity for professional development. In 2018, HR began to track globally the degree to which we conduct performance and career development reviews. Namibia and the Philippines are most diligent in respect to these practices. Our Nicaraguan region is developing their performance management system to align with career development — based on training matrices developed by each department. The Fekola operation has not yet implemented these review processes as they have only completed one year of operation. Plans for 2019 include the design of a performance management system.

# **TABLE 16** | Employees Receiving Performance and Career Development Reviews

#### **NICARAGUA**

La Libertad

Female Male

Management Non-managerial

0% 83%

Technical / Ops Admin / Support

86% 62%

### PHILIPPINES Masbate

 Female
 Male

 98%
 90%

Management Non-managerial

78% 92%

Technical / Ops Admin / Support

98% 96%

#### NAMIBIA Otjikoto

Female Male 100%

Management Non-managerial

100% 100%

Technical / Ops Admin / Support

100% 100%

#### NOTES

El Limon (Nicaragua) and Fekola (Mali) have not yet implemented performance management processes.

### DEVELOPING EMPLOYEES

Supporting Tertiary Education



"I SHOWED THAT WOMEN CAN
STAND OUT IN THE MINING
INDUSTRY, A FIELD THAT WAS
PREVIOUSLY CONSIDERED TO BE FOR
MEN ONLY. I AM CONTENT TO KNOW
THAT WE CAN NOW CONTRIBUTE
WITH OUR NEW KNOWLEDGE TO THE
DEVELOPMENT OF OUR MINES, OUR
COMMUNITIES AND OUR COUNTRY."

Belkin Soriano, El Limon Mine employee, graduated with honours from the Master's Degree program in Mining Operations – the first of its kind offered in Nicaragua in 30 years. Soriano stood out among the seven graduates of the program – not just as the only woman in the group, but also as the program's top student.

Originally from the town of Mina El Limon, a community next to B2Gold's El Limon Mine, Soriano received her degree from the American University in Managua.

Freddy Morales (with honours), Álvaro Rivas, and Sergio Bermudez also graduated successfully with a Masters in Mining Operations. To date, B2Gold has awarded some 200 scholarships to employees of both La Libertad and El Limon mines in Nicaragua, for university studies and technical education.

B2Gold was one of the principal promoters of a series of mining-related courses offered at the University since 2013, culminating in the Master's Degree in Mining Operations. In addition to facilitating the necessary conditions for its employees to be able to combine their responsibilities at the mines with their rigorous university studies, B2Gold also granted scholarships and provided financing for the master's program.

The American University recognized B2Gold in the graduation ceremony in November 2018 and presented B2Gold with an award for its vision, business leadership, and support for the training of professionals in the mining industry and the future of the country.

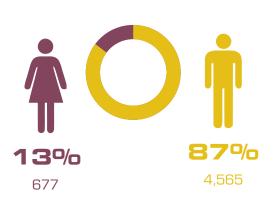


GRAPH 4 | Overall Employees by Gender

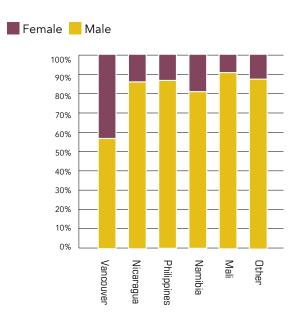
Female Male

5,242

TOTAL NUMBER OF EMPLOYEES



#### **GRAPH 5** | Gender Percentage by Region<sup>[1]</sup>



#### NOTES

<sup>[1]</sup> Female percentage in Vancouver has increased significantly due to change in reporting (Mali expatriates are now being reported under Mali); in addition contracts for Mali expatriate construction employees were all terminated.

#### TABLE 17 | Local Employment by Region

### **N**icaragua<sup>[1]</sup>

Local Employees 98.3%

Senior Management<sup>[2]</sup> roles filled by locals 82%

#### Philippines[1]

Local Employees 98.5%

Senior Management<sup>[2]</sup> roles filled by locals **75%** 

#### Namibia<sup>[3]</sup>

Local Employees 98.5%

Senior Management<sup>[2]</sup> roles filled by locals **68%** 

#### Mali<sup>[1]</sup>

Local Employees 95%

Senior Management<sup>[2]</sup> roles filled by locals **6**%

#### NOTES

- $^{(1)}$  "Local" is defined as individuals either born in the same country of operation, or those who have the legal right to reside indefinitely in that country.
- $^{[2]}$  "Senior Management" refers to regional executives and regional heads of department.
- [3] As per Namibian Affirmative Action (Employment) Act, "Local" is defined as "Namibian", which excludes expatriates, permanent residents and those who have domicile.

FIGURE 5 | Permanent Workforce by Employment Type

Full-time Employees Part-time Employees

3,162

FULL-TIME EMPLOYEES

O.2%

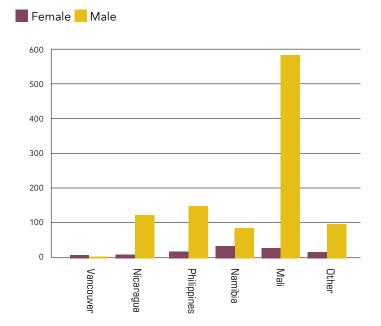
**TABLE 18** | Employees by Contract Type and Gender

TABLE 19 | Employees by Contract Type and Region

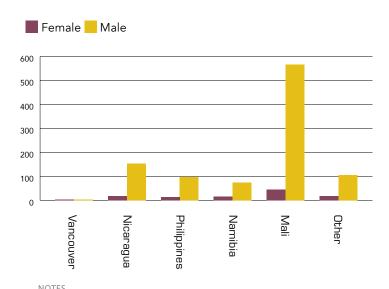
Туре	Male	Female	Total	%	Туре	Vancouver	Nicaragua	Philippines	Namibia	Mali	Other	Total
Permanent Employees	2,673	495	3,168	60%	Permanent Employees	95	1,053	845	875	213	87	3,168
Fixed-term	293	51	344	7%	Fixed-term	6	40	62	50	686	100	344
Supervised Labour	1,599	131	1,730	33%	Supervised Labour	_	_	_	_	1,730	_	1,730
Total	4,565	677	5,242		Total	101	1,093	907	925	2,029	187	5,242

PART-TIME EMPLOYEES

#### **GRAPH 6** | New Hires by Gender

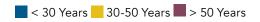


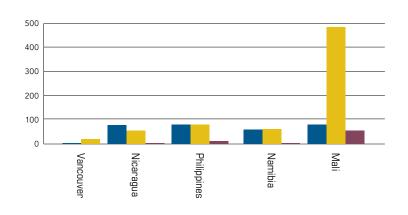
**GRAPH 8** | Employee Turnover by Gender<sup>[1]</sup>



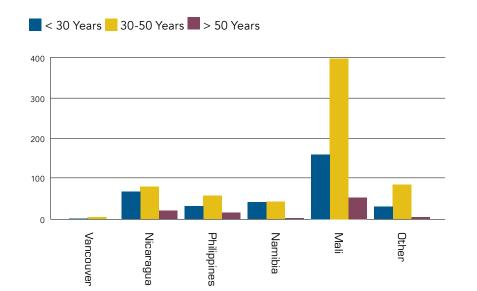
<sup>101</sup> Mali turnover rate high due to Fekola construction employment contracts terminated in 2018.

#### **GRAPH 7** | New Hires by Age





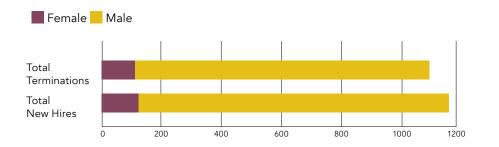
**GRAPH 9** | Employee Turnover by Age<sup>[1]</sup>



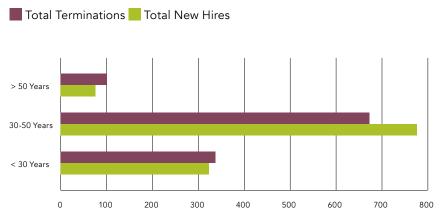
#### NOTES

<sup>[1]</sup> Mali turnover rate high due to Fekola construction employment contracts terminated in 2018.

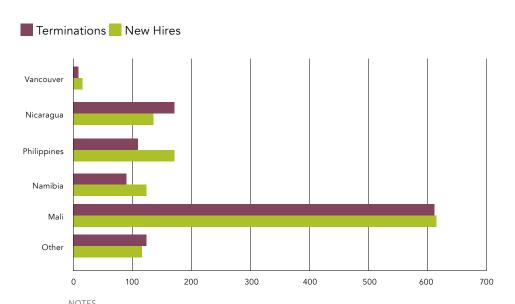
GRAPH 10 | Employment Rate by Gender



**GRAPH 11** | Employee Rate by Age



**GRAPH 12** | Net Employment Rate by Region<sup>[1]</sup>



In Mali turnover rate high due to Fekola construction employment contracts terminated in 2018. In Mali, 34% of contracts that were terminated (i.e. 206 of 611 terminations) were actually

carried over to new contracts (i.e. new hires) resulting in these rates.

TABLE 20 | Employee Wages and Benefits

Mine	Total (\$ '000)
La Libertad	12,950
El Limon	17,423
Masbate	15,469
Otjikoto	38,313
Fekola	46,906
Exploration	_
Other (Head Office)	21,601
Consolidated	152,662

### OCCUPATIONAL HEALTH AND SAFETY

55 | Responsible Mining Report 2018

Mining, milling and processing inherently involve high risk activities with the potential to expose employees, contractors, business partners and other stakeholders to physical, chemical and other safety or health hazards. Effectively managing the health and safety risks inherent in our business is essential to protecting our workforce and the communities in which we operate. We are focused on identifying, understanding and controlling the risks associated with hazards in the workplace because we believe that everyone has the right – and it is possible for everyone – to return home healthy and safe at the end of each and every day.

while none of our operations completed the entire

year without any LTIs, four of our five operations

had three or fewer LTIs (one each at Otjikoto and

Masbate, two at Fekola, and three at La Libertad).



Masbate Mine reached over three years and

LTI in 2018:

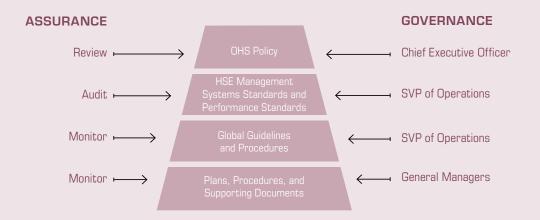
approximately 17.8 million man-hours without an

#### MANAGING HEALTH AND SAFETY

We recognize that it is our responsibility to provide a safe work environment for our employees, contractors and visitors. Our Occupational Health and Safety (OHS) Policy states our commitment to protecting and promoting the safety, human health and welfare of our workers, communities and stakeholders.

A global set of standards, guidelines and operating procedures detail the accountabilities, mandatory controls and minimum requirements for managing our operations in a way that protects people.

FIGURE 6 | HSE Risk Management Governance



# KEY COMPONENTS OF OUR HSE RISK MANAGEMENT SYSTEM INCLUDE:

- Standards: Key risks associated with HSE across the locations where we operate are supported by global standards and procedures that set the minimum mandatory requirements for everyone working on B2Gold's behalf.
- » Audits: To ensure all HSE standards are consistently, properly and effectively implemented, an independent team (external, independent experts) conducts site audits every year (i.e. alternating annually between HSE Management System Standards and HSE Performance Standards, ensuring each site will be independently audited for each set of Standards approximately every two years) to observe practices, examine documents and records, and interview key site management, employees and contractors.
- Monitoring and Reporting: We perform internal performance trend analysis and management system and performance review. Learning lessons through quality incident investigations and reviews are vital to preventing recurrences and raising the bar on our performance. We distinguish high potential incidents, known as Serious Injuries and Potential Fatal Occurrences (PFOs), in order to ensure that significant risks and incidents are managed appropriately according to their severity. We communicate incident investigation findings and corrective actions across all our operations to prevent recurrence related to PFOs; fatalities are reviewed with executive management and Board of Directors.

In 2018, we updated our HSE Policies, Management System Standards and Performance Standards. These updated Policies and Standards incorporate changes within B2Gold to reflect our maturity as a senior mine operator, to incorporate lessons learned and improvements from the past several years of auditing our sites' systems and performance, and to bring our HSE requirements and controls in alignment with updates to internationally recognized standards and guidelines. This includes ISO 14001:2015, ISO 3100:2009, ISO 45001:2018, the International Cyanide Management Code, ICMM, Canadian Dam Association, Hazard Analysis Critical Control Point (HACCP), and others.

A key component of our OHS risk management is quality incident investigations and reviews and in 2018 we implemented several measures to improve our performance in this area. We developed a globally standardized incident investigation methodology and training program. As part of the roll-out of this program, we provided training to our lead HSE staff from all operations at our internal global 2018 HSE Conference (see page 58). We also implemented a Catastrophic HSE Incident Reporting and Investigation Procedure that requires, in the case of a catastrophic incident (such as a fatality), additional measures including a site-independent lead investigation findings and corrective actions to prevent recurrence.

Technical safety training is provided to all employees working at our mine sites, and safety inductions are conducted for all site visitors. Our training programs are competency- and evidence-based, ensuring that all workers have the requisite skills, knowledge and competence to complete their work activities in a safe and skillful manner. Contractors are required to meet the same HSE standards and requirements as all B2Gold staff and, in many cases, contractors adopt our systems and controls directly.

B2Gold believes that everyone is responsible for workplace safety. Therefore, we have safety committees at all sites and hold regular safety meetings to help address the needs of each site. All B2Gold sites have safety committees representing 100% of B2Gold workers. These committees have been established at our La Libertad, El Limon, Masbate and Otjikoto mines for several years, and in 2018 they were established at our Fekola Mine as it completed its transition from construction to steady-state operations. These HSE committees take on different forms to meet the varying requirements across the jurisdictions where we operate, but they are all comprised of worker, management and union (where present) representation. This joint representation of managers, supervisors and workers on our safety committees helps us hold each other accountable for superior safety and health practices, and provides the leadership and resources needed to achieve our safety vision.

We implement the HSE Management System and manage HSE performance with dedicated and experienced HSE personnel at both the corporate and site levels. All our operations have seen their management systems further develop and their safety performance improve (as indicated by independent audit findings and/or reduced injury frequency rates). A key focus for our Fekola operation in 2018 was implementing operational safety controls and developing its HSE team capacity. This was accomplished as evidenced by the operation's ability to maintain its strong safety performance following the departure of experienced expatriate managers after the completion of construction. As planned, in 2018, we added an HSE Adviser and an HSE Management Systems Coordinator at our Otjikoto Mine to increase the operation's OHS capacity and to improve HSE systems and performance at that operation. We also made changes to key HSE personnel at both of our Nicaraguan operations to bolster continued HSE performance improvements at those sites.

B2Gold's corporate Board of Directors has an HSESS Committee. The Committee assists the Board to oversee our HSE and CSR policies, programs and performance.

### FATIGUE MONITORING

Making Mining Safer

During 2018, safety at the Otjikoto Mine was enhanced through the implementation of a state-of-the-art fatigue monitoring system in the mining fleet – accompanied by fatigue training and awareness programs.

Otjikoto management realized that fatigue, particularly among its night shift truck operators, was one of the highest risks that the operation was faced with. In the latter part of 2017, two one-month trials with two separate commercial systems were conducted. The trials ran roughly concurrently with five units from each vendor being placed on Otjikoto's haul truck fleet. The trials were divided into two phases: a silent phase of two weeks in which the fatigue units were activated, but operators were not notified, and an active phase of two weeks with operator notification.

Both systems demonstrated that operational fatigue risk was significant and that implementation of such a solution was warranted. Following the trials, Hexagon Mining OpGuard by Guardvant was selected based on higher performance. The OpGuard system captured a total of 3,628 fatigue and distraction-related events during the one-month trial, of which 3,223 events were logged in the silent phase and 405 events in the active phase – translating to an 88.8% reduction in reportable fatigue and distraction-related events.

A decision was made to install the system in the haul truck fleet (22 trucks) during 2018, with further planned implementation in 2019 within all heavy mobile fleet equipment (including contractor mining fleet equipment). In early 2018, Otjikoto's Fatigue Management Steering Committee was formed to ensure smooth systems integration. By August 2018, installation of the OpGuard system was complete.

Implementing a fatigue management system has provided the operations team with significant information to better manage its workforce – including knowledge of when critical fatigue periods occur throughout the day and which operators are consistently fatigued. This helps the team to implement counter measures



In assessing symptoms, causes and approaches to address individual fatigue, the team implemented several initiatives and controls:

- » fatigue awareness counselling for operators;
- » supervisor training to manage fatigue;
- » change in shift schedules to reduce fatigue;
- » improved fatigue reporting procedures; and
- » awareness campaigns for worker families to learn about risks associated with fatigue and to encourage support at home.

The solution to address operator fatigue at Otjikoto is one where technology, training and awareness combine to make the mine a safer place to work. B2Gold is evaluating whether to expand this technology to our other operations, with a trial scheduled at our Fekola operation in 2019.

#### HIGH POTENTIAL RISK CONTROL

In 2017, we introduced two additional incident categories - Serious Injuries and Potential Fatal Occurrences (PFOs)elevating the profile of high-risk events to ensure that these are treated with appropriate seriousness and concern. Starting in mid-2017 and carrying through 2018, an evaluation of the root causes and trends of these two incident classifications revealed that the majority of Serious Injuries have been hand or finger injuries (e.g. fractures or finger amputations or partial amputations), and the majority of PFOs have been interactions between heavy mobile equipment, light vehicles and/or workers on the ground. These are "classic" findings within construction and heavy industry, but still serve to highlight where risks are elevated within our operations and require corrective action. We have implemented several controls at our sites, including removing workers from certain activities/ areas (e.g. additional equipment isolation, removing spotters from tipping faces, etc.), conducting training, and awareness campaigns on manual handling techniques (focused on hand and extremity injuries). These hazards and risks (associated with hand/finger injuries and with equipment/vehicle/worker interactions) are significant risks at all of our operations and, in 2019, we will foster collaboration between our sites to ensure that we reduce these risks and build on our OHS successes across the B2Gold organization.

To further learn from these high potential risk events, in 2018 we also formalized a company-wide significant incident alert system whereby we are able to quickly and effectively share the lessons from the investigation of a high risk occurrence or incident at one operation with all other operations. Sites are then required to evaluate the incident and risks with respect to their operation and implement proactive corrective actions if unacceptable risks are identified. This system was rolled out in the second half of 2018 and has been highly successful in alerting other operations to potential highrisk activities or hazards before an incident occurs at another operation.

# CONTINUAL IMPROVEMENT IN HSE OUR GLOBAL HSE CONFERENCE

In June 2018, B2Gold held its first ever global HSE Conference at our Masbate Mine in the Philippines. We brought together over 20 of our senior HSE personnel from five operating mines (and our Burkina Faso development project) with the objective of sharing knowledge and experience and creating stronger personal and professional connections among our sites and HSE personnel. Some of our leading HSE practices from across our operations were presented with discussions on how they can be adapted to improve practices globally.

Among the topics covered were incident investigation, occupational hygiene, waste rock dump design and slope stabilization, and progressive rehabilitation. Field demonstrations of revegetation techniques, emergency response drills and other topics were addressed. The experiences gained will serve as part of individual professional growth, and also to increase the capacity of our global HSE teams. The Conference was supported at every level of the Company, with executives in attendance, showing that HSE performance is a top priority for B2Gold.



In 2019, B2Gold will continue to implement measures to reduce risks and incidents in these two identified areas (hand/finger injuries and equipment/vehicle/worker interactions). We will also continue to evaluate the root causes of the high-risk incidents, evaluate future trends, and implement necessary controls to eliminate high potential risks. One area of improvement will be the reporting of near miss incidents – incidents that did not result in injury or damage but had the potential to do so. Near miss incidents can be an indicator of potential increased risks, and improving the recognition and reporting of near miss incidents can significantly improve worker safety and safety culture.

#### **OCCUPATIONAL HEALTH**

We have a responsibility and commitment to protect the health and well-being of our workers, contractors and visitors to our sites. We seek to identify and manage risks that arise from physical, chemical, and other workplace hazards by anticipating, identifying, evaluating, and controlling these health hazards and exposures. To accomplish this, our sites carry out specific occupational health activities and programs, depending on the exposure at each site.

Our OHS Policy and seven Occupational Health Performance Standards are the primary tools that guide our efforts towards eliminating workplace health hazards and occupational illnesses. These standards require that occupational health evaluation, planning and design are integrated into our business development strategies. B2Gold monitors all sites to verify they are meeting industrial hygiene standards, including regulations on dust, noise control, and ergonomics. We also promote wellness, including initiatives regarding fitness for work, personal nutrition, HIV/AIDS, malaria prevention and fatigue management. We have identified that musculoskeletal strains and fatigue management are some of the top health risks at our operations and we have implemented programs to address these risks.

We also monitor occupational exposures including dust, noise, vibration and hazardous chemicals. This monitoring focuses on workers with higher exposure risk or higher incidence of occupational illness. In 2018, we conducted an internal capacity-building workshop attended by lead OHS staff from all of our operating sites with a focus on occupational hygiene workplace assessment, evaluation and monitoring, and exposure controls/management (see page 58). Following this training, several sites have budgeted for additional occupational hygiene monitoring equipment to be purchased (either in 2018 or early 2019) and our staff are working to take lessons learned from this training and implement improved occupational hygiene assessment, monitoring and corrective action programs.

Across our operations the most common occupational illnesses were noise-induced hearing loss (22 cases) and musculoskeletal disorders (16 cases). We also reported 58 cases of foodborne illness from food prepared in our mess halls for our workers. The majority of these cases came from a single incident. Following the identification of the cause of this incident at our Fekola operation, all food handling and preparation procedures were reviewed, workers were re-trained, and in a follow-up audit by external experts we were assessed as having no major deficiencies in this area. No additional cases have occurred.

In 2018, we implemented additional controls to reduce the risk of malaria to our workers and saw a corresponding reduction in cases reported amongst our expatriate employees who travelled to malaria-prone sites. In 2018, we reported only nine cases of malaria compared to 40 in 2017. We will continue to review cases and improve controls to further reduce this number.

#### SAFETY PERFORMANCE

2018 was our third consecutive year without a fatality at any of our operations. In addition, 2018 saw an all-time low for all injury types (LTI, RWI and TRI) for the Company. Our global LTI Frequency Rate saw a reduction of over 50% to 0.22 (based on 200,000 man-hours); our LTI + RWI Frequency Rate for all operations was 0.28; our TRI Frequency Rate saw a reduction of over 50% to 0.63 (all Frequency Rates based on 200,000 man-hours)<sup>16</sup>. Our ultimate goal is zero harm to our workers and safe production, and we continue to approach this goal.

We implemented several additional controls at our operations in 2018; improvements that were identified through: our risk management and assessment processes to proactively identify and reduce risks, our incident investigations to determine root causes and propose corrective actions to prevent incident recurrence, our audit program of our HSE management systems by external, expert auditors, or through any number of additional industry leading practices that we have in place. Additional controls included updating our HSE Policies and Standards to align with changes in international best practice standards (see page 56), implementing additional Emergency Management and Crisis Guidelines (see page 63), developing a globally standardized incident investigation methodology and training program (see page 56), formalizing a global significant incident alert system, and implementing a state-of-the-art fatigue monitoring and alert system in our haul truck fleet (see page 57). All of these improvements are part of our commitment to continuous improvement in our health and safety performance.

On October 14, 2018, Masbate completed three years and approximately 17.8 million man-hours without an LTI. Unfortunately, the three-year period without an LTI came to an end when a worker suffered a fractured rib in December 2018. However, the operation completed 2018 with just the single LTI and an outstanding safety record. Similar safety records were achieved at our La Libertad, Otjikoto and Fekola operations, which respectively completed 2018 with three, one and two LTIs and approximately 12 million man-hours (combined). Our El Limon operation also reduced their LTI Frequency Rate by over 45%, from 2.31 in 2017 to 1.22 in 2018.

Our La Libertad Mine reduced its LTI Frequency Rate by over 90% in the last two years, and at the end of 2018 we moved key HSE personnel from La Libertad to El Limon to improve collaboration, to better share successes between the operations, and to further progress ongoing improvements at El Limon.

We introduced our two high potential incident risk classifications, Serious Injuries and PFOs, in mid-2017. From mid-2017 through the end of 2018 (total period of 18 months), across our five operating mines, we reported 12 Serious Injuries and 23 PFOs. Of the 12 Serious Injuries, 11 were hand or finger injuries (e.g. fractures or finger amputations or partial amputations) and one was a nonhand fracture. Sixteen of the 23 PFOs were interactions between heavy mobile equipment, light vehicles and/ or workers on the ground. The remaining PFOs were related to Energy Isolation (three), Suspended Loads (one), Struck by Object (two) and Blasting (one). These findings align with the risks that we identified in our risk assessments across all of our operations. However, we need to do more in these areas to eliminate these risks from our workplaces. At several operations and in several work tasks we have been able to eliminate the worker from the area (e.g. removing spotters from tipping faces), thereby reducing potential for risk. We have enacted comprehensive training and awareness campaigns at both our Fekola and Otjikoto mines on manual handling techniques focusing on hand and extremity injuries. We will continue these programs in 2019 and expand them to our other operations as well.

Benchmarking 2017 safety data: progress of ICMM members, www.icmm.com/safetydata-2017

**TABLE 21** | Historical Safety Performance

TRI Frequency Rate								
Mine	2014	2015	2016	2017	2018			
La Libertad	nr	nr	nr	2.1	1.3			
El Limon	nr	nr	nr	3.6	1.2			
Masbate	nr	nr	nr	0.46	0.54			
Otjikoto	nr	nr	nr	0.98	0.27			
Fekola	nr	nr	nr	0.37	0.19			
Consolidated	nr	nr	nr	1.31	0.63			

LTI Severity Rate								
Mine	2014	2015	2016	2017	2018			
La Libertad	26.3	17.6	40.1	26.6	8.9			
El Limon	18.5	46.0	53.6	35.1	28.6			
Masbate	1.9	2.0	0	0	1.42			
Otjikoto*	1.6	2.8	10.6	2.53	12.09			
Fekola**	-	0**	22.9	0	4.32			
Consolidated	n/a	n/a	22.1	11.0	8.4			

RWI Frequency Rate								
Mine	2014	2015	2016	2017	2018			
La Libertad	nr	nr	nr	nr	0			
El Limon	nr	nr	nr	nr	0			
Masbate	nr	nr	nr	nr	0.16			
Otjikoto	nr	nr	nr	nr	0			
Fekola	nr	nr	nr	nr	0.04			
Consolidated	nr	nr	nr	nr	0.06			

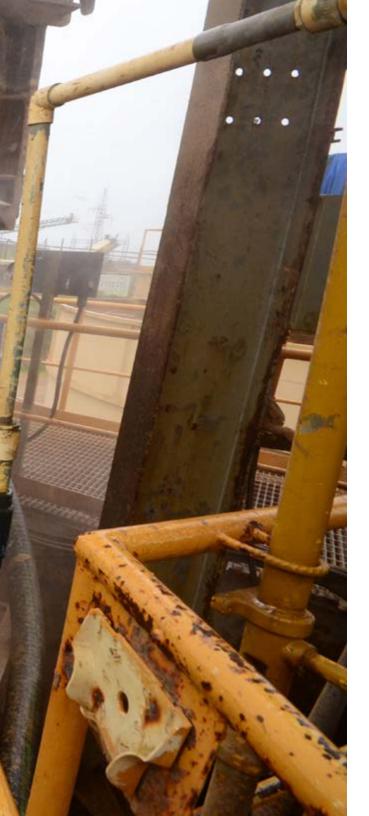
Fatalities								
Mine	2014	2015	2016	2017	2018			
La Libertad	0	0	0	0	0			
El Limon	2	0	0	0	0			
Masbate	0	0	0	0	0			
Otjikoto*	0	1	0	0	0			
Fekola**	_	0	0	0	0			
Consolidated	2	1	0	0	0			

LTI Frequency Rate								
Mine	2014	2015	2016	2017	2018			
La Libertad	2.9	1.3	1.7	0.66	0.16			
El Limon	1.6	2.2	2.6	2.3	1.2			
Masbate	0.11	0.07	0	0	0.03			
Otjikoto	0.2	0.2	0.16	0.14	0.07			
Fekola	-	0**	0.38	0	0.08			
Consolidated	n/a	n/a	0.83	0.47	0.22			

#### NOTES

- Frequency and Severity Rates are based on 200,000 man-hours.
  New information or a re-classification of injuries may cause a change in historical data.
- The dash (-) indicates that the time period did not apply to that project, i.e. Fekola did not start significant construction activities until 2015.
- » \*Statistics for Otjikoto began in April 2013.
- \*\*Statistics for Fekola began in February 2015.
- » nr = not reported
- » n/a = not applicable





"OUR GOAL IS THAT EVERY WORKER GOES HOME SAFE AND SOUND EVERY NIGHT. THAT'S WHY WE MAINTAIN A PERMANENT COMMITMENT SEEKING TO COMPLY WITH THE HSE MANAGEMENT SYSTEM STANDARDS AND PROCEDURES."

Wearing the personal protective equipment required to wash carbon screens atop the leach tanks at La Libertad Mine, Jose Manuel Urbina explained B2Gold's commitment to health and safety in his own words: "We're not all talk and no action. At B2Gold, we use only the best and most modern in terms of safety. Here, we comply with international standards."

Jose Manuel works at the process plant at La Libertad. In addition to protective gear, B2Gold ensures that Jose receives the specific training needed to do his job safely. Born and raised in the town of La Libertad, Jose Manuel has been working in the mining industry for 15 years. "We're all committed to health and safety at B2Gold," he said. "I know first-hand what it was like working in mining long before a reputable company like B2Gold was in place. I have witnessed how applying safety standards can make our workplace safer — and actually save lives."

Carlos Barberena, La Libertad Mine General Manager, confirmed Jose Manuel's statement, adding: "We are consolidating a culture of continuous improvement at all levels of the operation. For that reason, conformance with the B2Gold standards included in our Health, Safety and Environment Management System is a priority for each worker and for the management team."

Carlos is referring to B2Gold's internal set of HSE Management System and Performance Standards, which were updated in 2018 (see page 56) and which the La Libertad Mine has been audited against (by external experts) annually since 2014. The La Libertad Mine has improved its results in each audit and in 2018 demonstrated that critical safety controls were functioning at a high level; controls in areas ranging from

working at heights, energy isolation, confined spaces, electrical safety, hot work (i.e. welding, cutting and burning), to hazardous materials and reagent handling to traffic management.

"Our goal is that every worker goes home safe and sound every night," said William Ramirez, Safety Superintendent at La Libertad Mine. "That's why we maintain a permanent commitment seeking to comply with the HSE Management System standards and procedures."

The goal that William espouses has become a reality. In 2018, La Libertad Mine saw a 79% reduction in Lost-Time Injuries (LTIs) compared to 2017, enabling the operation to achieve 276 days without an LTI.

"The positive numbers are also evidence of the leadership and responsibility assumed by all workers at the Mine," William added.

Not only have the number of injuries reduced significantly at the Mine, but the few injuries that have occurred are also less severe. "B2Gold's La Libertad Mine concluded the year with an LTI Frequency Rate of 0.16 and a Severity Rate of 8.88," William noted, "compared to a Frequency Rate of 0.66 and Severity Rate of 26.55 in 2017."

B2Gold applies the same internationally practiced safety standards at all of its operations across the globe. In 2018, we brought our Nicaraguan senior Health and Safety personnel to participate in our global HSE Conference held at our Masbate Mine in the Philippines (see page 58). No operation better exemplifies the B2Gold commitment to safety, and to the continuous improvement and implementation of safety best practices, than our La Libertad Mine.

#### **EMERGENCY PREPAREDNESS**

Mining can pose significant HSE risks to employees and communities. The ultimate goal of B2Gold's HSE Management System is to prevent all incidents from occurring in the first place. At the same time, B2Gold maintains a high degree of emergency preparedness with appropriate plans, resources, and training in place to minimize the impact on workers, surrounding communities, the environment and operations, should an emergency event occur.

Guiding our approach to emergency management is our Emergency, Crisis and Disaster Management Standard. This Standard outlines the requirements that all of our sites must have in place to be able to adequately mitigate risk and prepare for potential emergency scenarios. We identified in 2018 the need to standardize additional components of our emergency and crisis response systems. In the second half of 2018 we added our Crisis and Emergency Management Guideline. This Guideline establishes a three-tier (site emergency response, site emergency management, and corporate crisis management) Crisis and Emergency Management System across all our operations and our corporate office, streamlines the

activation and chain of command for our Emergency Management and Crisis Management Teams, and increases our requirements for training, exercises and drill scenarios. Each site is working to update their operation's crisis and management systems to meet our new internal requirements and will have accomplished this by the beginning of 2019.

All our sites had emergency prevention and preparedness plans in place in 2018. Regular drills and simulations test emergency readiness. Visitors to sites must take part in a safety induction program so that they are informed about safety precautions and emergency measures during their visit. In addition, B2Gold maintains highly trained Emergency Response Teams (ERTs) at every site. These team members are the first responders to a mine emergency. The ERTs complete intensive (weekly, monthly and annual) training to make sure they are well prepared to respond in the event of an emergency, and the team members are experts in medical response, firefighting, hazardous materials response and emergency rescue. Our crisis and emergency response systems and preparedness are audited by external experts at least

EACH SITE IS WORKING TO UPDATE
THEIR OPERATION'S CRISIS AND
MANAGEMENT SYSTEMS TO MEET
OUR NEW INTERNAL REQUIREMENTS
AND WILL HAVE ACCOMPLISHED
THIS BY THE BEGINNING OF 2019.

every two years to ensure the necessary resources are in place to effectively respond if an emergency situation occurs.

There were incidents during 2018 that required emergency response resources. All responses by the ERT are evaluated through an incident debriefing review. These reviews provide us with assurance that our emergency response capabilities meet both our expectations and the need for high-level response.

TABLE 22 | 2018 Safety Statistics by Site

Site	Exposure Hours	Fatalities	Lost-Time Injuries	Restricted Work Injuries	Medical Treatment Injuries	Lost Days	LTI Frequency Rate	LTI Severity Rate	TRI Frequency Rate
La Libertad	3,761,641	0	3	0	21	167	0.16	8.9	1.3
El Limon	2,633,619	0	16	0	0	377	1.22	28.6	1.2
Masbate	6,340,444	0	1	5	11	45	0.03	1.4	0.54
Otjikoto	2,978,034	0	1	0	3	180	0.07	12.1	0.27
Fekola	5,282,188	0	2	1	2	114	0.08	4.3	0.19
Consolidated Global	20,995,926	0	23	6	37	883	0.22	8.4	0.63

NOTES

Frequency and Severity Rates are based on 200,000 man-hours. New information or a re-classification of injuries may cause a change in historical data.





# APPROACH TO MANAGING SOCIAL ASPECTS AND HUMAN RIGHTS

Engaging with stakeholders is an essential part of business. It allows a company to proactively identify and address issues, lowering operational and reputational risk. Engagement can also contribute to positive social and economic development when stakeholders are involved in identifying and designing programs to address community needs. B2Gold engages openly and respectfully with stakeholders to better understand actual or perceived impacts, ensure stakeholder views are considered in our operational decision-making, and build constructive and responsive relationships.

B2Gold's commitment to having a positive impact in the communities where we work is reflected in our Social Responsibility Policy. We do this by engaging with stakeholders to understand their views and consider them in our decision-making, investing in community development projects, and identifying and addressing adverse risks and impacts. We implement these broad commitments through a set of eight issuespecific Social Performance Standards at all operating sites (see Figure 7). These Standards apply to our operations, from exploration through closure, and to our supply chain and business partners. While they are systematically implemented at our five operating mines, implementation with suppliers, business partners, and at exploration sites is driven by the scope of the relevant activities and potential risks and impacts. As part of our Social Performance Management System, we initiated internal auditing of these Standards in 2018, with audit results reported to the SVP of Operations and site general managers. Indicators related to audit results will be included in our general managers' performance assessment criteria starting in 2019.

**FIGURE 7** | B2Gold Social Performance Management System Components





#### B2GOLD SOCIAL PERFORMANCE STANDARDS

- Stakeholder Engagement
- Grievance Management
- Community Investment
- » Land Acquisition and Resettlement
- » Local Content
- » Human Rights
- » Artisanal and Small-Scale Mining
- » Social Closure

#### IDENTIFYING, ASSESSING AND MANAGING IMPACTS

Mining operations have positive and negative impacts on local communities. Throughout our report we demonstrate the positive impacts we have on local communities, including through employment and procurement, and community and environmental initiatives. However, as a responsible mining company operating in developing countries that often have gaps in their enforcement of regulatory requirements and human rights expectations, we pay the most attention to the potential and actual negative impacts we can have on local communities. We approach the identification and assessment of these risks in several ways.

Environmental Impact Assessments (EIAs) are required by regulators as part of mine planning and permitting processes. These have been conducted at all sites and include stakeholder input in the identification and assessment of potential socio-economic impacts. While regulations do not often require consideration of vulnerable groups or gender, these are included in EIAs conducted from 2015 onwards at all sites, and in studies initiated by B2Gold for significant projects such as the Fadougou resettlement in Mali and the preparation for closure at La Libertad in Nicaragua.

#### **HUMAN RIGHTS COMMITMENTS AND MANAGEMENT**

As a company that operates in areas where there is significant risk of human rights impacts related to the presence of extractive companies, we recognize our responsibility to identify our human rights risks and impacts and actively work to manage them — at all of our sites and through our partnerships and business relationships. Our approach is outlined in our Human Rights Performance Standard, which is aligned with the Universal Declaration of Human Rights and other international human rights law, the United Nations Guiding Principles on Business and Human Rights (UNGPs) and the Voluntary Principles on Security and Human Rights (VPs). As a member of the Mining Association of Canada B2Gold has committed to implementing the VPs.

As part of our approach to human rights, we pay particular attention to the potential impacts and risks on minority and vulnerable groups (such as indigenous people, women and children) including the potential for slavery and human trafficking.

We have conducted human rights assessments at all of our sites during the period of 2017 to 2018 with the exception of El Limon, which will be assessed in 2019. Our assessments comply with our human rights commitments and are aligned with the UNGPs, the Organization for Economic Cooperation and Development (OECD) Guidelines on Multinational Enterprises and the Human Rights Impact Assessment (HRIA) Guidance and Toolbox prepared by the Danish Institute for Human Rights.

Our understanding of what it means to avoid infringing on human rights continues to evolve and develop at the corporate and site level. At the corporate level, our CSR team works with our SVP of Operations and external experts to understand the implications of committing to various international standards, and discussions are held with the Executive Committee and the Board where relevant before integrating commitments and requirements into policies, standards, and our approach to human rights assessments. A significant development in 2018 was the finalization of a Supplier Code of Conduct (see page 23 for further details).

A human rights lawyer was engaged to conduct human rights assessments in Mali, the Philippines and Nicaragua (La Libertad assessment conducted in 2018; El Limon planned for 2019), and reviewed the assessment that was conducted in Namibia. As part of these assessments, interviews are conducted with internal and external stakeholders to identify human rights risks and impacts and understand how they are currently managed. The assessments, including recommendations to address salient risks and impacts, are discussed and confirmed with B2Gold executives, and shared with the B2Gold Board HSESS Committee. Responsibility for implementing the recommendations is assigned to site-level managers, and progress is reviewed as part of our annual social performance audit.

AS PART OF OUR APPROACH TO HUMAN RIGHTS, WE PAY PARTICULAR ATTENTION TO THE POTENTIAL IMPACTS AND RISKS ON MINORITY AND VULNERABLE GROUPS ... INCLUDING THE POTENTIAL FOR SLAVERY AND HUMAN TRAFFICKING.

Training is a fundamental element of implementing our human rights management approach. As part of the human rights assessments in Mali, the Philippines, Namibia and Nicaragua, training for relevant managers was conducted. Human rights training material that will be used in employee inductions to raise awareness of our human rights commitments and management practices is being developed and will be rolled out to all operations in 2019.



TABLE 23 | Human Rights Training

Country	# Employees (Excluding contractors)	# Hours Human Rights Training	# Employees Trained On Human Rights	% Employees Trained On Human Rights	# Security Personnel (Including contractors)	# Security Personnel Trained On Human Rights	% Security Personnel Trained On Human Rights
Nicaragua	1,093	11	81	7.0	375	8	2
Philippines	880	520	877	99.7	488	442	91
Namibia	938	312	13	1.4	48	13	27
Mali	2,029	7	7	0.3	105	99	95

The issues that have been identified in our human rights assessments as the most likely to occur and have the potential for the most severe negative impacts are considered salient. When determining how to manage our salient issues to reduce risks and address impacts, we consider the nature of our relationship to the issues. Where we have direct control over the activities that can cause an impact, we assume responsibility to directly manage these. Examples include resettlement, internal employment practices, and private security practices. If an issue is related to our activities but we do not have direct control (such as contributing to potential impacts through our business partnerships) we consider the leverage we have with the business partner and work to address the issue. Examples include public security forces that have been assigned to protect our mine's perimeter, or labour conditions in a supplier's off-site manufacturing facility. There are also issues where we do not have a direct business relationship with the activity but are still linked to it, such as artisanal mining that occurs on our permit without our consent. Where we are linked to a salient issue, we consider the leverage we have with relevant stakeholders, and work with stakeholders to address the issue.

Security is a salient issue across all operations. Resettlement is a salient issue at our Fekola and Masbate operations, which have ongoing resettlement projects with the potential for lost access or rights to land, or disruption to livelihoods. The artisanal mining on our La Libertad, Masbate and Fekola permits can have negative impacts on human health and the environment. Where possible we work with government and local stakeholders to control artisanal mining and reduce these impacts, but largely it is out of our control due to limited regulatory capacity and enforcement. Closure is a salient issue for our La Libertad project, as it will likely cease operations in the medium-term. Due to the economic dependence of the town of La Libertad on the project there will likely be significant negative socio-economic impacts when the mine closes. Further details on these salient issues, including the nature of risks and negative impacts that have occurred and existing management practices, are outlined in relevant sections of this report.

#### STAKEHOLDER ENGAGEMENT

Effectively engaging with stakeholders is proven to be critical to business performance as it allows a company to proactively identify and address issues, thereby lowering operational and reputational risk. Engagement can also contribute to positive social and economic development when stakeholders are involved in identifying and designing programs to address community needs. B2Gold engages openly and respectfully with stakeholders to better understand actual or perceived impacts, ensure stakeholder views are considered in our operational decisionmaking, and build constructive and responsive relationships. Our Stakeholder Engagement Performance Standard aligns with the IFC Social Performance Standards.

Community Relations managers at each site generally hold overall responsibility for managing stakeholder engagement, with general managers and other senior staff holding responsibility for various relationships or activities. Sites meet weekly, monthly and/or quarterly to share feedback from stakeholders, identify and review social risks and issues, and update stakeholder engagement plans accordingly.

Stakeholders are identified by mapping out project impacts and risks, and the influence and interests of stakeholders related to the project. Collective or individual rights are considered, and vulnerable groups are identified based on the nature of potential impacts from ongoing or upcoming project activities. Stakeholder engagement plans are developed to manage our engagement activities, including how we

share information, listen to, and respond to stakeholders. We engage through a variety of methods, depending on the social and cultural context: public meetings, door-to-door visits, community assemblies or interest-group gatherings. Formal consultation committees that involve vulnerable groups are in place at Fekola for general engagement, natural resources management, community development, and resettlement, and at Masbate for community development planning. Public consultations were also conducted at La Libertad, El Limon and Masbate as part of permitting activities. Non-salient issues that were raised by stakeholders and addressed by B2Gold include local employment and procurement and potable water at El Limon, water management, blasting, and contractors' labour practices at La Libertad, flooding, waste dump stability, and community development at Masbate, and environmental management at Otjikoto.

An ongoing area of focus for B2Gold is to ensure we are proactively sharing our understanding of our impacts and how they are being managed with stakeholders. For example, ongoing monitoring is conducted based on impact assessments and results are shared with stakeholders. In Nicaragua there are regular bilateral and group meetings with key stakeholders; in the Philippines, a multi-stakeholder monitoring team that includes local representatives conducts an annual review of the management of impacts; in Namibia, environmental monitoring data is shared directly with local stakeholders through social media forums; in Mali, annual town hall-style meetings are held in local communities.





#### MINE TOURS

#### An Open Door to Responsible Mining

"IT IS AN EYE OPENER FOR ME
BECAUSE WHEN I THOUGHT OF
MINING, WHAT I THOUGHT OF
IS THE DESTRUCTION OF THE
ENVIRONMENT. I AM NOW AWARE,
BECAUSE OF THIS TOUR, THAT
MINING, IF SCIENTIFICALLY DONE
AND THE MINING COMPANY IS
RESPONSIBLE, IS NOT BAD AND
DESTRUCTIVE."

These were the observations of Maria Flora Pandes, Department of Education Schools Division Office, Camarines Norte. Maria was one of the participants of the half-day mine tours at Masbate. The mine tours are part of an "open day" campaign that has welcomed over 2,500 visitors to the Masbate Mine – including two Secretaries from the Department of Environment and Natural Resources. The mine tours have also been extended to B2Gold employees and contractors – in particular those who have only limited insight into our full operations.

The "open day" mine tours was conceived after B2Gold completed a school facility project in 2016. In conversations with B2Gold staff, teachers from the Province of Masbate expressed their desire to visit the mine to learn about how B2Gold operates in Masbate.

B2Gold saw this as an opportunity to educate stakeholders about responsible mining, as it was clear that many were uninformed of how a responsibly-run mine operates. It was a fortuitous opportunity, as teachers are well-respected within communities

and would be credible ambassadors to share what they've witnessed.

The mine tour is a half-day activity. It includes a presentation on the history of the Masbate Gold Project and an overview of the phases of mining covering exploration, construction, operation, and mine closure and rehabilitation. It also covers socioeconomic development programs and environmental protection and management.

Visitors receive a safety orientation (as do all visitors to site) which exposes them to our safety culture and performance expectations. Visitors are able to view most principal areas of operation including pits, waste rock facilities and tailings storage facilities. Before concluding the tour, a discussion session is held with B2Gold representatives to answer questions and ensure visitors go home with a better understanding of responsible mining.

Prior to this experience, many participants were apprehensive about the Masbate Mine and the rumoured danger it could pose to the surrounding communities.

Perceptions changed and were reflected in the formal feedback mechanism where visitors have an opportunity to discuss the experience. Perceptions changed from negative to positive, and participants acknowledge the Company's stringent safety procedures, responsible mining techniques, and the social and economic benefits that neighbouring communities receive in the process. Some visitors ask whether "the Masbate Mine would consider operating in our town [sic]."

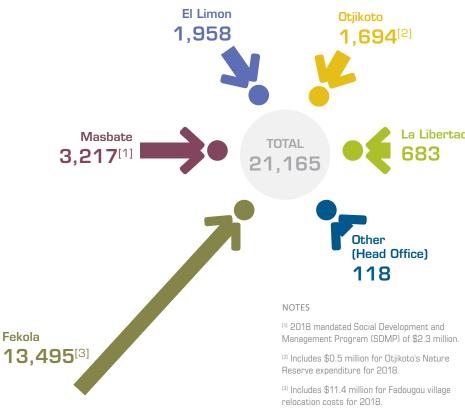
### COMMUNITY INVESTMENT

Mining projects provide a unique opportunity for engaging with and contributing to the development of host communities. As part of our socio-economic impact and legacy, one of our goals is to help build sustainable communities, with B2Gold acting as a catalyst and community members playing a lead role in their own development.

We believe that working in an inclusive manner with local stakeholders, government, and NGO partners to identify, select, and implement projects is an important factor in the success of our community development projects. By putting decision-making in the hands of stakeholders, we aim for local ownership of projects and outcomes, improved alignment between government and B2Gold efforts, and strengthened local capacity to build prosperous and healthy communities. Our Community Investment Performance Standard, which aligns with the IFC Performance Standards and ICMM guidance, defines how we focus on sustainable contributions to the communities where we operate.

Responsibility for managing community investment budgets and the implementation of projects rests with the Community Relations department at each operation. B2Gold has established governance committees composed of local stakeholders, including representation from women and vulnerable groups, in the Philippines<sup>17</sup>, Namibia, and Mali that evaluate and select potential projects. At all sites, projects are selected based on regularly updated assessments of community needs. In Nicaragua, there is a formal assessment conducted upon project completion that evaluates project outcomes, including stakeholder feedback. We are working to implement a similar approach at all sites to ensure our investments are effective and sustainable.

#### **GRAPH 13** | Community Investment (\$ '000)



 $<sup>^{17}</sup>$ In the Philippines, the community development committees are established in line with regulatory requirements.





#### RURAL DEVELOPMENT

#### Reducing Poverty and Food Insecurity

The fight against poverty and food insecurity is an enormous challenge in Sub-Saharan Africa. Poverty affects more than 40% of Mali's 18 million people, of which most live in rural areas. According to the Malian National Institute of Statistics, more than a quarter of the Malian population has to contend with food insecurity.

The New Rice for Africa (NERICA) and the Fadougou Market Garden projects are two rural development initiatives developed by B2Gold and implemented over the last three years in collaboration with small farmers and a women's association from Fadougou. The projects are in their third year and their impacts are beginning to be significant.

The objectives of these projects are to build the capacity of farmers and market gardeners by introducing new techniques and varieties of products, as well as strengthening their organizational capacity. The participants received training and technical assistance from the Local Agricultural Technical Services from Kéniéba and the AFECK project. (Read more about AFECK on page 43).

#### RICE PRODUCTION YIELDS EXCEED EXPECTATIONS

The NERICA project brought an adapted rice production activity to the region. The rice variety and agricultural techniques were developed by the Africa Rice Center and introduces an improved variety of African-Asian hybrid rice – better suited to the arid environment of the region. The project started in 2016 with six farmers and a modest initial investment by B2Gold. In 2017, 48 farmers joined and a further 57 joined in 2018, the project's third year. The annual rice production of the project started at 20,483 tonnes in 2016, increased to 71,873 tonnes in 2017, and 50,376 tonnes in 2018. The NERICA yield threshold is 2.5 t/ha and 18 farmers exceeded this threshold.

Although land availability is an issue in the region, all participating farmers used their own land. By the third year of implementation, farmers were largely independent and bought seed and consumables themselves with B2Gold providing fertilizer. A training program for certified seed growers is planned for 2019 to make seeds available at a local level.

#### FADOUGOU MARKET GARDEN

Also in its third year of implementation, the Fadougou Women's Market Garden project started with 16 women. Now, twenty women cultivate a one hectare plot of land. After an initial modest support offered by B2Gold, the women market gardeners are now completely independent.

The garden's yield has grown from 1,986 tonnes of vegetables in 2017, to 14,669 tonnes in 2018. The women's associated annual income rose from approximately \$3,580 in 2017 to approximately \$21,430 in 2018 – an increase of almost 500%. These income levels allowed 18 of the women to rise above the poverty line (based on the UNDP poverty line estimate for Mali).

For both projects, the beneficiaries made contributions — either through the provision of land or financial contribution — as a sign of commitment and trust in the projects. B2Gold contributed technical training, seed supply, land management, equipment, and an irrigation system.

Some of the produce is sold to the local villages. A significant amount of vegetables are consumed by the women's families: approximately half a tonne of vegetables were consumed in 2017, and now 3,667 tonnes have been consumed by the women's families in 2018. Gradually, the dietary nutrition of local families is improving.

#### **OVERCOMING BARRIERS**

In the initial stages, skepticism from the communities was one of the main challenges to secure the full commitment from participants. Delays in the implementation of the rice program due to lack of seeds or fertilizers, and limited water availability for the market gardens, were temporary hurdles. Lack of discipline in production monitoring by the women and farmers also contributed to difficulties along the way.

B2Gold's Fekola Mine purchases a significant portion of the produce from the women market gardeners. As production grows, alternative markets will need to be found in order for this economic activity to be sustainable.

Despite the challenges and difficulties, the positive results of the initiatives have certainly confirmed the potential of the agricultural sector in the area, and the possibility to involve more people in these economic activities.

#### MALI SCHOLARSHIP FUND

#### Providing a Path to the Future

Yatandou Tembine is one of the female beneficiaries of the B2Gold Mali Scholarship Fund. The fund was established to grant 10 scholarships across Mali. The Fund represents an investment over seven years that will provide financial support for students to cover tuition fees, study aids, health insurance and/or subsistence for the duration of their studies.

The aim of the program is to provide deserving Malian students with access to quality tertiary education and to increase their chances of successfully completing their studies — which will help them secure professional jobs and contribute to socio-economic development in Mali.

"I urge parents and host tertiary institutions to support our young people, and to show them the path to excellence, merit, and the future," said Mohamed Diarra, Country Manager of B2Gold Mali — expressing his satisfaction at seeing the initiative come to fruition.

To ensure inclusivity and transparency, applicants were assessed by a selection committee comprising representatives from Kéniéba's district authorities, school administrators and technical services, B2Gold representatives, as well as an external consultant.

Various factors were considered in the vetting process, including academic performance, home district, type of qualification sought, and personal financial circumstances. In support of B2Gold's Local Content Social Performance Standard, students from the

Kéniéba district (the region where B2Gold's Fekola Mine is located) were given preference. A minimum target for female students was established, and students studying STEM subjects (science, technology, engineering, and math)—like Yatandou—were given special consideration. The 10 recipients include five girls and five boys; four of the 10 are from the Kéniéba district.

"I AM DETERMINED TO BECOME A CIVIL ENGINEER AND WOULD LIKE TO HAVE MY OWN CONSTRUCTION COMPANY AFTER MY STUDIES... HAVING INHERITED KINDNESS FROM MY PARENTS, I HAVE ALWAYS THOUGHT OF MAKING PLANS TO HELP PEOPLE IN NEED... GIVING THEM WORK AND MANY OTHER THINGS."

The scholarship recipients are now studying at various Malian tertiary institutions towards qualifications in the fields of medicine, pharmacology, finance, information technology, environment and engineering. B2Gold's investment in education is a focus area of our Community Development Plan for Mali.



#### MASBATE SCHOLARSHIPS

A Chance at Life

"MY CHILDHOOD WAS DIFFICULT,
JUGGLING BETWEEN THE
REQUIREMENTS OF SCHOOL AND
EARNING A LIVING. I HAD TO
LIVE IN ANOTHER TOWN WITH
MY GRANDMOTHER SO I COULD
GO TO SCHOOL. I SOLD CANDIES,
SNACKS, AND EVEN DID LAUNDRY
FOR OTHERS TO SURVIVE. EVERY
DAY WAS A PAINFUL STRUGGLE."

Hannibal Tamayo, aged 26, is a scholarship program beneficiary of Barangay Puro, one of the eight impact communities of the Masbate Mine. His life was turned around in April 2009. "I had reached a point where I wanted to just give up... but the Scholarship Program saved me and gave me another chance at life."

The Masbate Gold Project (MGP) Scholarship Program started with 56 students in 2009. It has now grown to 432 students in 2018. Cumulatively to date, the program has had an intake of 1,135 college students and 1,867 high school students — with 357 and 289 graduates respectively to date.

Of the college graduates, 183 are currently working professionals with 11 employed by the Masbate Mine; 60 are qualified teachers, educational instructors and aides; 12 work for local government units; the remaining are either employed by non-government organizations or are self-employed.

Gilbert Pusing, aged 25, came from a family supported by artisanal mining. His parents had always wanted him to become an engineer, and he was urged to study hard and steer clear of the perils of artisanal mining. He graduated from high school as class valedictorian — an achievement which earned him a place in the MGP Scholarship Program and enabled him to study Civil Engineering in Masbate City. "My life became easier. I didn't have to worry about my tuition fees and monthly allowance. It helped me focus on my goals." In 2014, Pusing passed the board exam and he fulfilled his father's dream; he is now an engineer with the Department of Public Works and Highways.

While a percentage of scholarship beneficiaries migrate outside of Masbate, most remain to teach in their schools as Tamayo had done – taking pride in their achievement and giving back to their communities through their dedicated profession. "I am the first member of my clan to earn a college degree. As the family bread winner, I have sent two of my siblings to college... My parents are now the owners of a small convenience store in our village."

### DEVELOPMENT OF FEKOLA'S COMMUNITY DEVELOPMENT PLAN

A PARTICIPATORY APPROACH

In 2018, B2Gold and local stakeholders developed a Community Development Plan (CDP) for the 10 communities surrounding the Fekola Mine. A working group of 46 people was created to guide the process with representation from local communities, local and regional officials, technical officers, women, youth, artisanal miners, in-migrants, and the elderly. A full socio-economic survey was conducted in the surrounding villages to establish a baseline for tracking changes in socio-economic indicators over time. The participatory process for discussing, defining, measuring and analyzing community well-being was based on the Beyond Zero Harm framework, developed by the Devonshire Initiative.

The Working Group came to an understanding of the current state of health, education, livelihoods, infrastructure and other factors, and developed objectives and targets. A smaller committee is responsible for identifying, selecting and overseeing community projects that align with the above. The results of these activities were formalized in an approved Community Development Plan, which will be implemented in 2019.

The process is ongoing and will eventually be led by community leaders themselves. A shared vision of community development has been established, putting community stakeholders in the driver's seat of their own development outcomes.



#### **TESDA TRAINING CENTRE**

Offering Alternative Livelihoods

"ARTISANAL MINING WAS THE ONLY AVAILABLE SOURCE OF INCOME FOR MOST OF US. AS ONE OF EIGHT SIBLINGS, I HAD TO HELP MY FAMILY FINANCIALLY. ARTISANAL MINING IS NOT FOREVER; IT IS NOT A GOOD LIVELIHOOD."



Alex Pusing, aged 22, was among the first graduates of the Shielded Metal Arc Welding course at the "MGP Eight Barangay TESDA Training Centre." He was an artisanal miner since childhood. Within several weeks of enrolling, Alex was a certified welder. A local company recruited graduates directly from the Centre and Alex is now working in his new trade.

The Centre subscribes to the national competency-based education program through the Technical Education and Skills Development Authority (TESDA). The Centre was developed as part of B2Gold's Social Development Management Program (SDMP)<sup>18</sup> investments. The training facility is the first of its kind in the town of Aroroy and among the best in the region.

TESDA-based training offers students the opportunity to gain certified competencies designed for easy integration of its trainees into the workplace. The curriculum is modelled on a simulated work environment with condensed training periods to gain the required skills. Within two to three months students can complete basic qualifications, receive certification, and progress to higher certification through continued study.

The idea to develop a vocational training facility, based on the TESDA program, was identified in the early phases of the Masbate Gold Project. Leaders from the neighbouring communities and B2Gold recognized the mismatch of

available skills within the communities to the employment opportunities either at the mine or in other industrial sectors. Given the high level of poverty, the annual SDMP investments targeted projects for health, education and infrastructure before addressing the need for establishing the vocational centre.

Melecio Recto, a former small-scale miner, is one of the community leaders who supported the training centre project. "With the annual inflow of SDMP funding from [the Masbate Mine], an opportunity was presented to allocate a portion to a co-funded project that could finally realize our dream of establishing this centre."

With the active commitment of barangay officials and with guidance from B2Gold, the TESDA Centre was inaugurated in June 2018. Since opening, 30 students graduated from the welding course. An intake of students in a wide variety of vocational courses (e.g. masonry, plumbing, carpentry, driving, and food and beverage service) is planned for 2019.

The centre is currently managed by a board of directors headed by Melecio: "I saw the need to break away from artisanal mining [and dependency on farming]. This centre will provide life-long alternative opportunities for our people to realize an income. Because of their training, our graduates can start small businesses, secure jobs, or start associations that will help kickstart the socio-economic development of our communities."

<sup>18</sup> SDMP is an obligatory investment requirement by mining companies in the Philippines to contribute to social development management programs within host communities.

### GRIEVANCE MANAGEMENT

Mining is a large-scale industrial activity that generates both real and perceived impacts. All B2Gold sites have implemented grievance mechanisms that receive, investigate and respond to complaints from community stakeholders. Our goal is to identify and manage impacts, including providing remedy when we have caused or contributed to a negative impact, and to address concerns in a timely, respectful, and locally appropriate manner. Effective grievance mechanisms help us manage our impacts and address perceptions. Our Grievance Management Performance Standard aligns with the IFC Performance Standards and the effectiveness criteria in the Guiding Principles on Business and Human Rights.

Grievance management is the responsibility of the Community Relations department in each region, which report to the General Manager and involve other departments in the investigation and management of grievances. In Mali and the Philippines, the grievance mechanism includes an appeal process where the grievance is reviewed with local officials when a complainant is not satisfied with the initial response from B2Gold. Beyond an annual audit of our Grievance Management Performance Standard, sites also seek feedback from stakeholders on our grievance management. In Nicaragua, these reviews led to the inclusion of contractor workers' complaints in our community grievance mechanism, and in Mali to enhanced efforts to raise awareness of the mechanism and how it works. In the Philippines there are ongoing challenges related to addressing perceptions from local stakeholders that lodging a grievance will result in retaliation.

At El Limon, high-risk grievances were lodged regarding an operational issue of hot water released from underground mining into a local stream, and at El Limon and La Libertad issues were raised related to blasting, traffic and local employment. In the Philippines, complaints were addressed about

mine infrastructure construction activities, compensation issues related to resettlement, and the use of force by security forces. The majority of complaints in Mali relate to the resettlement of Fadougou village and are low-risk. Namibia did not receive any grievances in 2018.

There has been significant project-induced in-migration to the Fadougou village next to our Fekola Mine in Mali. Despite the fact B2Gold had previously improved the supply of clean water by fixing or drilling new boreholes, a complaint was lodged in 2018 by Fadougou residents regarding increasing water needs. We responded by drilling a new borehole to accommodate the expanding needs of the village. This grievance allowed us to consider whether existing boreholes were sufficient in other neighbouring villages due to population growth. As a result of our assessment, 14 new boreholes were drilled in 2018, allowing us to proactively prevent a community grievance.

Local employment is highly promoted by our El Limon Mine in Nicaragua, either by directly employing local people or through opportunities for local contractors. Several demands and complaints from community members were raised in 2018 seeking additional opportunities and better working conditions with contractors. To address these issues, a joint commission was created with representation from the unions, community leaders, contractors and B2Gold to review our recruitment process, labour issues, and technical training among other aspects. One of the immediate outcomes from the commission was the creation of a technical training school for heavy machinery operators that has benefited several community members in 2018.

TABLE 24 | Grievances

Country	Filed in 2018	Addressed and Resolved in 2018	Filed Prior and Resolved in 2018
Nicaragua	59	46	12
Philippines	36	32	12
Namibia	0	0	1
Mali	246	185	12



#### **SECURITY**

Security management for the mining sector considers potential risks to employees, property and assets while ensuring respect for human rights. B2Gold operates in countries and locations that present significant security risks from a range of sources. As a member of MAC, B2Gold has committed to implementing the Voluntary Principles on Security and Human Rights (VPSHR) at its sites and will annually report on its progress through MAC. VPSHR-compliant risk assessments were carried out by a third party consultant in collaboration with our security departments at La Libertad, Masbate and Fekola as part of the human rights assessments conducted in 2017 and 2018 and will be conducted at El Limon and Otjikoto in 2019.

Private security contracts are in place at our sites in Nicaragua and the Philippines, and Bamako in Mali; security staff in Namibia and Mali are B2Gold employees with reporting through the Security Manager to the General Manager and our SVP of Operations. B2Gold has agreements with relevant governments to ensure a public security presence in the communities next to our mines in Nicaragua, the Philippines and Mali.

Risks are identified by site Security departments through regular threat assessments, meetings with the Community Relations department, local stakeholders and public security, VPSHR and annual risk assessments, monitoring and patrols, and community grievance mechanisms. Security is a salient issue across all operations. Table 25 shows the security risks both to B2Gold and to local communities.

Risks at sites vary and include labour or political unrest, anti-mining protests, and criminal activities. At our Masbate and La Libertad mines our private security forces face the potential for violent conflict with intruders who seek to access open pits, low-grade stockpiles or waste dumps. In Mali and the Philippines there are risks related to terrorism. While the Otiikoto Mine has generally lower security risks due to its physical isolation, there is the potential for conflict with poachers targeting game on the Otjikoto Nature Reserve surrounding the Mine, and labour unrest. At La Libertad, Masbate and Fekola risks related to public security include potential conflict when relocating artisanal miners from permits or resettling occupants following land acquisition, and ensuring proper oversight of equipment or funds transferred to public security to avoid misuse.

In Nicaragua, political and social unrest initiated in April 2018 when national security forces reacted violently against civilians protesting the regime of the president. In the ensuing months, hundreds of people were killed, injured and arrested. During this period, several roadblocks and the general social unrest impacted our supply chain, although we were able to mitigate the situation and maintain continuous operations. Training has been provided to improve the capacity of security staff for readiness and preparedness to address criminal activities, and a plan has been developed to address recommendations from the VPSHR risk assessment conducted at La Libertad in late 2018.

Masbate has a policy governing rules of engagement and the use of force which has been rigorously implemented and enforced, resulting in a marked reduction in violent conflict with intruders since 2015. As a result of the VPSHR risk assessment, Masbate has integrated human rights into ongoing internal and joint public security training, including the involvement of the National Commission on Human Rights, and has initiated regular engagement with public security and local stakeholders to confirm security arrangements and address any issues that arise. As a result of its involvement with the VPSHR risk assessment at Masbate, the private security provider engaged

the national regulatory body that oversees private security, resulting in the development of a VPSHR-based training module that is now included in the mandatory training for all private mine security forces in the Philippines.

AS A MEMBER OF MAC, B2GOLD HAS COMMITTED TO IMPLEMENTING THE VOLUNTARY PRINCIPLES ON SECURITY AND HUMAN RIGHTS (VPSHR) AT ITS SITES AND WILL ANNUALLY REPORT ON ITS PROGRESS THROUGH MAC.

Fekola conducts regular coordination with public security forces and other mining companies active in the region and has implemented a security management system that aligns with ISO 18788, ANSI/ ASIS PSC.1-2012, and the VPSHR. Ongoing training and risk assessment align with the VPSHR, and contracts with private security include relevant human rights clauses. B2Gold's expectations regarding the VPSHR were shared with relevant authorities and public security staff prior to a public security deployment to an exploration permit in Mali to remove artisanal miners in the first quarter of 2018. Due to ongoing engagement with the artisanal miners, local authorities, and public security, the miners left the area prior to an established deadline, ensuring that conflict was avoided. (See story on page 81.) The Fekola Security department has followed up on recommendations from the human rights assessment conducted in 2017 by integrating security and human rights material into ongoing training and the site security management system. Regular engagement is conducted with the Gendarmerie detachment stationed adiacent the mine and with regional public security officials. These engagements are to discuss the approach of public security to potential security situations related to the mine, and to reinforce a shared commitment of B2Gold and public security to avoid the use of force.



#### YOUTH INTRUSIONS A HUMAN RIGHTS CONCERN

Masbate experiences intrusions into its mining areas from community members who scavenge for scrap materials and ore, with the active participation of children. This activity poses serious risk of accidents and physical harm, given the condition of the land and the lack of illumination at night. The problem stems from an intricate combination of causes including poverty and lack of skills and education.

In 2018, Masbate started working with various stakeholders (including government, police and social services) to target interventions for at-risk youth and their parents. A program has been implemented that provides education, skills development and capital for micro-enterprises to provide opportunities for families to engage in small income or employment generating activities that will, in the long term, be a substitute for gold panning and ore scavenging.

TABLE 25 | Security Risks to B2Gold and/or Local Communities

Country	Terrorism	Political Unrest	Criminal Activity	Labour Unrest	Anti-mining Protests	Poaching	Conflict with Artisanal and Small-Scale Miners	Conflict Over Land Access
Nicaragua		•	•	•	•		•	•
Philippines	•		•		•		•	•
Namibia				•		•		
Mali	•	•	•	•			•	•

### ARTISANAL AND SMALL-SCALE MINING

Artisanal and Small-Scale Mining (ASM) refers to formal or informal mining which is characterized by low capital intensity and high labour intensity and relatively simple methods for exploration, extraction and processing. It is estimated that more than 100 million<sup>19</sup> people globally rely on this sector for income, mainly in developing regions.

While B2Gold recognizes ASM as an important livelihood, the presence of ASM around our mines and on our exploration permits in Nicaragua, the Philippines and Mali, results in risks and impacts. These include conflict over access to land for ASM, intrusions for the purposes of ASM or scavenging ore, an increase in crime and corruption in local communities, loss of livelihood following displacement of artisanal miners, the presence of child or forced labour, and the potential liability for labour, and environmental or health and safety impacts. The absence of effective and enforced regulation of ASM by authorities increases these risks. ASM is a salient issue for B2Gold due to the potential for conflict between artisanal miners and private or public security, potential for impacts on people's livelihoods, and likelihood of negative environmental impacts.

Our strategic approach to ASM is to seek and maintain a peaceful co-existence, balancing the need to protect our operations with the right to a livelihood for artisanal and small-scale miners. Our Artisanal and Small-Scale Mining Performance Standard outlines how we will manage relations and interactions with ASM actors, with the objectives of protecting our people and property, maintaining our licence to operate, and supporting wider community benefits. ASM management is usually overseen by a senior manager, with support from Community Relations, Security, Operations and Exploration departments.

Our approach to co-existing with ASM depends on the context at each site, including the political and social dynamics, the presence and capacity of the regulator, and the nature of the risks. Management practices are outlined below. (Practices are in place in Nicaragua, the Philippines and Mali unless otherwise noted).

- » Coordinate between Community » Relations, Operations, Exploration, and Security departments to manage risks.
- » Establish and communicate security protocols to local stakeholders on access to land.
- » Conduct regular monitoring and reporting on ASM activities and environmental impacts.
- » Engage with local and national stakeholders and authorities to reduce risks and establish access to land and controls on ASM.
- » Support alternative livelihood projects, particularly for artisanal miners displaced due to land acquisition.
- » Conduct regular risk assessments and update action plans (Mali, Nicaragua).
- » Coordinate with regulators to conduct an annual census and ensure regulator involvement in controlling ASM access to land (Nicaragua).

- Support the establishment of a small cyanide processing mill (Nicaragua) or purchase ore from small-scale miners (Philippines) to diminish mercury use and provide livelihood stability.
- Established a local committee and information centre including artisanal miners, local authorities and regulators to ensure effective information sharing and dialogue (Nicaragua).
- Provided support for capacity building to enable the formalization of cooperatives and improve their environmental, health and safety, and mining practices (Nicaragua).
- Consider ASM during closure planning to ensure ongoing access to land and economic activity (Nicaragua).
- Adapt mine plan and design to facilitate access to land for ASM (Philippines).

### MANAGING ASM INTRUSIONS APPLYING THE VOLUNTARY PRINCIPLES

In early 2018, a small number of artisanal miners initiated activities on a permitted exploration project near Fekola. Once detected and following dialogue with B2Gold representatives, they vacated the site. Days later the group returned and numbers rapidly increased to an estimated 1,400. After two months of engagement and negotiation, the miners refused to leave and prevented B2Gold staff from monitoring the site. The Company formally requested the government to intervene and a public security force was deployed nearby.

B2Gold had previously engaged with authorities and public security forces to share our corporate commitment to respect the Voluntary Principles on Security and Human Rights, and identified shared principles on avoiding the use of force and the need for dialogue. A timeline was established and communicated to the artisanal miners requiring their withdrawal. Prior to the public forces' arrival at the area, most of the miners had left peacefully and confrontation was avoided.

<sup>&</sup>lt;sup>19</sup> Working Together – How large-scale mining can engage with artisanal and small-scale miners, published by ICMM and IFC on ASM.

#### RESETTLEMENT

Resettlement refers to either the physical or economic displacement (i.e. loss of access to income sources or livelihoods) as a result of project-related land requirements.

Resettlements are complex undertakings which necessitate the consideration of cultural, social, and economic factors and impacts. Ensuring impacted stakeholders understand and participate throughout the process can help to create positive outcomes for community well-being, including socio-economic opportunities. Resettlement is a salient issue at our Fekola and Masbate operations, which both have ongoing resettlement projects with the potential for lost access or rights to land, or disruption to livelihoods. Our Land Acquisition and Resettlement Performance

Standard includes commitments to avoid or minimize the need for resettlement and to mitigate the negative impacts of economic or physical displacement where resettlement is required. Vulnerable groups are identified during the assessment phase, and plans are developed to address impacts on specific households and individuals. Resettlements have been conducted or are underway in Nicaragua, the Philippines and Mali. Resettlement is generally managed by our Community Relations departments, in coordination with Compliance, Operations, and senior management.

TABLE 26 | Resettlement Conducted During 2018

Mine	Resettlement Sites	Households Resettled (Households Pending)	People Resettled (People Pending)	Comments
LA LIBERTAD	Jabali Antena	0 (0)	0 (0)	Resettlement activities are now complete as the remaining households declined to move and the pit was redesigned accordingly.
EL LIMON	Santa Pancha	18 (2)	67 (11)	Resettlement anticipated to be complete in Q1 2019.
MASBATE	Montana	338 (22)	1,690 (110)	Resettlement anticipated to be complete in Q1 2019.
	HMBE waste rock dump	1	5 (101)	One household resettled in 2018. Activities will continue in 2019 to assess whether 101 farmers on a separate lot purchased in 2018 will be economically displaced (and to develop a livelihood plan, should this be the case).
	Colorado pit closure	1	5	One household resettled.
FEKOLA	Fadougou	0 (913)	0 (3,272)	Construction continued throughout 2018, to be completed January 2019. Signing of compensation agreements began in December 2018; compensation will start in January 2019. Residents will move into new households throughout 2019.

Resettlement was required in order to progress with the Jabali Antena mining project. Pit design alternatives were adopted in order to reduce the impact of displacement. In applying our Resettlement Performance Standard to this project, we implemented a voluntary and participatory approach to resettlement.

Between 2014 and 2016, regular on-site monitoring and house-to-house visits were carried out to identify and address impacts, deliver key messages (e.g. explaining the compensation framework), and provide responses to frequent concerns. Main challenges included the completion of negotiated agreements within the compensation framework and continuing the resettlement process without any social conflict. Agreements were not reached with some households who desired to stay in place and not relocate. In 2017 and 2018 the pit design was again reviewed in order to avoid impacting these households, confirming the voluntary nature of the process.

New households were supported in re-establishing themselves through campaigns to sensitize them to their responsibilities in caring for their new properties, and the importance of responsible water and energy usage. Reforestation took place, and new living areas were treated against viral disease. In 2017 the area closer to the proposed pit was prepared and property deeds were delivered to relocated households.

Resettlement activities in 2018 focused on negotiations with over 80 artisanal miners working in the Jabali area who were economically displaced — with the support and involvement of the Ministry of Mines and religious and municipal authorities. Several meetings were held to agree on a compensation framework developed in collaboration with the Ministry of Mines. Minutes of each meeting were signed and shared with all involved stakeholders for transparency.

A third party compliance audit is planned for 2019 to evaluate the resettlement process and assess the current socio-economic status of households resettled.



**JABALI ANTENA** (SANTA DOMINGO), NICARAGUA



### **SANTA PANCHA** (EL LIMON), NICARAGUA

Several decades ago the El Limon Mine was closed, and the community's major economic driver was lost. Left unmonitored, residents of Santa Pancha constructed households in precarious zones in the region. When related social risks were identified by B2Gold, a need for a government-led resettlement was recommended. To ensure that this community could re-establish itself successfully, an alliance was formed between the government (Ministry of Housing), a resettlement project contractor, and the American Nicaraguan Foundation (ANF). B2Gold has assumed an advisory and monitoring role in the resettlement process. The mitigation of impacts has been handled both through joint meetings with all affected families and alliance members, and by managing individual grievances. Families could present complaints via the B2Gold community grievance mechanism. B2Gold facilitates resolution of these grievances through coordination between stakeholders and the government institution in charge.

Families have presented complaints regarding construction defects, delays in finalizing community infrastructure; and the size of the household and lot received. Processes employed to resolve these grievances include direct mitigation measures and/or coordination between relevant parties to guarantee liability of the government institution in charge. Since B2Gold is not managing the resettlement process, it is challenging to ensure that the activities are in line with our Land Acquisition and Resettlement Performance Standard and we receive complaints for issues that we cannot easily address.

Local government requested support in 2018 to finalize the resettlement process. Meetings were held with a first group of household owners to understand their concerns and expectations. Authorization was requested to assess households, structures and plots. After analyzing data, a compensation proposal based on market and replacement costs was presented, discussed, and agreed upon with this group of households. Agreements with 18 of 20 households have been signed; a similar process for the remaining two households should be finalized in early 2019.



**FADOUGOU** (FEKOLA), MALI

### **MONTANA** (MASBATE), PHILIPPINES



Various communities are near, or contiguous with, our Masbate operations, and there are ongoing land acquisition and resettlement activities. The resettlement for the Montana pit was nearly completed in 2018 with fewer than 20 households remaining to be resettled. While most households chose financial compensation and self-relocation, B2Gold engaged with relevant stakeholders to identify and develop a resettlement site where an estimated 20 households will receive serviced and titled lots and houses. B2Gold will formalize its approach to resettlement for Masbate in 2019 in a Land Acquisition and Resettlement Policy Framework that aligns with B2Gold Performance Standards and will be applied to upcoming resettlements where required.

Several households that self-relocated after receiving compensation for their crops and structures were identified during the 2017 human rights assessment as experiencing worse living conditions than prior to displacement. This was due to poor housing choices and limited options for livelihoods to replace their work as small-scale miners. Following the completion of the resettlement in 2019, B2Gold will conduct a survey of the occupants who opted for cash compensation and self-relocation to assess current living conditions and livelihood status. Further support will be considered depending on the nature of impacts.

The village of Fadougou is located adjacent to the main Fekola open pit. Although the relocation of the village was not a requirement of the Mine Construction Permit, extensive engagement with government and community stakeholders led to a decision to proceed with a resettlement project. This decision was made due to the proximity of the village to the mine site, the potential for social risks, and the opportunity to improve the well-being of the community. A Resettlement Action Plan (RAP) and a resettlement-specific Environmental and Social Impact Assessment (ESIA) were developed according to international best practice and were approved by national authorities.

Impacts identified through the ESIA and the RAP include potential impacts on land use and inter-community conflict: these are being managed through the implementation of the Local Convention on Natural Resource Management, which establishes bylaws for land use and natural resource management. Village and area committees have been created and formalized to address any conflicts that arise. Dialogue between affected communities and implementation of the Local Convention will be intensified in 2019 prior to the physical relocation of households to New Fadougou. Additionally, joint community projects are being planned where neighbourhood communities will share benefits.

From 2015 to 2017 baseline data collection, assessment, planning, engagement and consultation activities have occurred including, among others, socio-economic and asset surveys, definition of the location and house design as well as the validation of the compensation framework. Key activities and decisions have been discussed and agreed in the multi-stakeholder committee created to inform the planning process with representation from a range of stakeholder groups. These include original village members, youth, women, and in-migrants, along with the support and participation of local authorities.

In 2018, ongoing activities included village construction, presentation of compensation agreements to households, consultation activities on compensation and physical resettlement planning, resolution of resettlement-related grievances, pursuit of permits for land access, security of tenure and urban planning, and livelihood restoration. The village construction will be completed by January 2019. Compensation and physical resettlement are planned for the first and second quarters of 2019, respectively.





The resettlement of a community is a sensitive undertaking. The rebuilding or development of livelihoods as part of this process often determines whether a resettlement is an opportunity for community strengthening and leaving a lasting impact.

The original village of Fadougou is located adjacent to the main Fekola open pit. Although the relocation of the village was not a requirement of the Fekola Mine Construction Permit, B2Gold was concerned about potential risks to the health, safety and well-being of the residents, due to the proximity of the village to the mine site. Following engagement with local and regional authorities, B2Gold proposed a resettlement program based on national law, cultural context, international standards, and industry best practices.

New Fadougou is a major investment that includes the development of over 700 structures. Homes will have solar panel lighting and latrine facilities. Supporting infrastructure includes 28 km of roads, four solar-powered water pumps, two hand pumps and a 7 km-long water network providing water points to all households. Public buildings include a mosque (with madrassa), a school with nine classrooms, a clinic and a maternity ward. Other social areas, including a playing field and market area, form part of the new community. Construction commenced in late 2017 and will be completed in early 2019. The phase to move the Fadougou community members into their new homes is scheduled to begin the second quarter of 2019.

B2Gold created a New Fadougou construction team which included training and hiring individuals from the same community that was being relocated. The team consisted of 365 individuals who were trained under the AFECK project (see page 43). Eighty-five percent of the construction personnel were recruited from the surrounding communities.

From the outset, B2Gold wanted to ensure this activity produced lasting benefits: "We wanted to make sure that when construction concludes, we didn't just leave an aimless unemployed, yet technically skilled, group of people on their own", said Ben Scott, Fadougou Relocation Construction Project Manager. "We devised a program to mentor potential entrepreneurs from the

construction team, help them start a business, and then hire them as contractors to give them commercial experience."

B2Gold selected proficient individuals from the construction team who also had a strong work ethic and a drive to run their own business. We provided these individuals with guidance and support to register three small companies. The small company members voted to appoint their presidents, how profits would be divided, and invested some of their own money in the venture.

The three new business entities were nurtured and excelled beyond expectations. Motivated to prove themselves, they produced high quality homes at a record-setting pace. Team members supported each other to learn new trades and to take on tasks outside their scope — becoming well-rounded and skilled artisans in the process.

"WE DEVISED A PROGRAM TO MENTOR POTENTIAL ENTREPRENEURS FROM THE CONSTRUCTION TEAM, HELP THEM START A BUSINESS, AND THEN HIRE THEM AS CONTRACTORS TO GIVE THEM COMMERCIAL EXPERIENCE."

To complement their technical skills, the small business contractors will now receive additional training in marketing, project bidding, managing profits, capital investment, and equipment lifecycle analysis. B2Gold is working with AFECK to design an entrepreneurship course that will focus on nurturing these skills. B2Gold's Local Content Officer will be guiding others who want to receive similar small business support.

The next steps for these three small businesses will be the most challenging. As New Fadougou construction comes to an end, they will need to pursue future work on their own. A market of opportunities exist in the region as New Fadougou and other economic activities in the region have developed a demand for building services. B2Gold will be monitoring their success.

### PLANNING FOR MINE CLOSURE

Responsibly closing our sites and managing our legacy properties is an important part of our commitment to provide for long-term environmental conservation of the areas where we operate. In addition, the transition following mine closure has the potential to create significant socioeconomic challenges in the communities surrounding a mine. B2Gold applies an integrated, multidisciplinary approach to mine closure and transition with an awareness of the need to plan for the social and environmental changes that will occur. Proper mine closure can significantly minimize risks and liabilities, reduce the need to manage the property in perpetuity, and successfully transition the land from a mine site to a stable land resource that will support meaningful use for nearby communities.

Guiding our approach to responsibly reclaim our sites is our Reclamation and Closure Planning Performance Standard, which sets the minimum requirements to proactively plan, manage and monitor the long-term environmental liabilities associated with our sites. In addition to this, our Social Closure Performance Standard and Mine Closure Human Resources Toolkit ensure that we review the socioeconomic impacts of closure. These requirements direct all sites to develop and maintain a closure and post-closure strategy. Strategies encompass environmental and socioeconomic risk assessments, stakeholder engagement plans, community development plans, and progressive reclamation and post-mining closure and reclamation plans that are integrated into the mine planning process.

We update the estimate of the environmental closure liability at each of our sites on an annual basis. In 2018, our consolidated estimated environmental closure liability for our El Limon, La Libertad, Masbate, Otjikoto and Fekola mines was \$145 million. In addition, many jurisdictions require mining companies to post financial security for all or part of the remaining costs associated with the mine reclamation and long-term protection of the environment. This is a precautionary measure to

ensure that governments will not have to unreasonably contribute to the costs of reclamation and environmental protection of a mine site if a company is unable to meet its obligation to fully close and reclaim the site.

Currently there are such requirements in the Philippines (relating to our Masbate operation) and Mali (relating to our Fekola operation). In Mali, we have reached an agreement with the Malian government to fund an escrow account based on a production basis (i.e. per tonne of material processed), and there will be an accompanying escrow agreement on how and when the funds can be used or released based on the site's evolving reclamation status and environmental liability. B2Gold currently posts all financial securities as required by these jurisdictions.

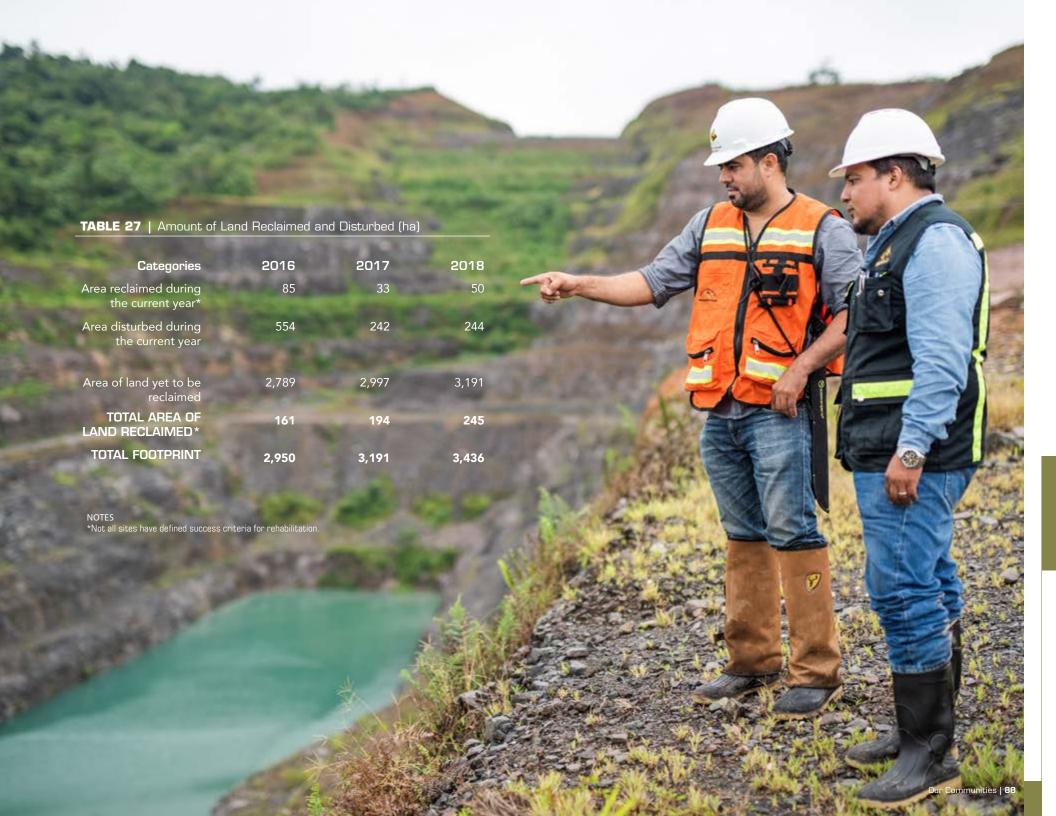
In 2018, site-wide Mine Reclamation and Closure Plans were in place at each of our operating mines. Our Otjikoto Mine updated its plan in 2018 per regulatory requirements. Site activities focused on revegetation of disturbed areas and slopes available for progressive reclamation. Fekola's reclamation activities progressed in 2018 including the initial pushback and revegetation trials of finished slopes of its waste rock storage facilities.

These trials are an early step in the process of developing site-specific designs, construction/implementation practices, and closure success criteria that will continue to be advanced throughout the life of the mine.

Some of our most successful slope stabilization and rehabilitation practices have been implemented at our Masbate operation. Several waste rock storage facilities (e.g. HMBE and Syndicate) have been designed, constructed and rehabilitated to manage surface water and mitigate potential acid rock drainage from sulfide waste rock. In 2018, we held an internal HSE Conference (see page 58) where we brought environmental managers and personnel to our Masbate operation to observe and learn the practices employed at the site, and we are working to adapt and transfer these practices to our other operations around the world.

Our La Libertad Mine continued to advance its planning and implementation of mine closure and transition activities as the mine approaches the end of its operational life. In 2018, a Closure and Transition Plan was submitted to and was approved by regulatory authorities for the Jabali Central Pit and related ancillary facilities. Subsequent final closure work per the Jabali Central Pit final Closure Plan and the site-wide final Closure Plan commenced in 2018 and will continue into 2019. Additional environmental studies were also advanced in 2018, including hydrogeological and geochemical studies and tailings storage facility closure cover optimization, some of which will continue in 2019. In conjunction with these technical studies, socio-economic planning was advanced to help transition the operation to a postmining future for workers and communities.

During the year, an additional 244 hectares were disturbed by our operations (across all sites), and a total of 245 hectares are in various stages of reclamation (50 additional hectares entered into reclamation in 2018), bringing the total cumulative disturbed ground not yet reclaimed to 3.191 hectares.



In 2018, our teams continued to evolve the Closure Plan for our La Libertad Mine in Nicaragua, notably completing a socio-economic impact study considering closure scenarios. Our Masbate Mine in the Philippines completed work on an Employee Displacement and Communication Plan and began its implementation, and continued work on a social closure plan. Our Fekola Mine in Mali has an integrated Rehabilitation and Preliminary Mine Closure Plan in place, developed as part of the ESIA which identifies the need for social closure planning in the future, which is appropriate for the current stage of the life of mine. At Otjikoto, an integrated Mine Closure Plan was advanced in 2018. A comprehensive land use strategy has been developed that includes sustainable economic development potential for community stakeholders. Again, planning for societal impacts of closure will become progressively more detailed nearing the end of mine life, with ongoing stakeholder consultation, integration with HR, social risk management, and community development strategies.

#### RESPONSIBLE PLANNING INTEGRATED MINE CLOSURE

Following the Company's practice for responsible mining, planning has continued for the closure and transition of La Libertad Mine — oriented toward enhancing post mining opportunities identified in the local communities, minimizing the social and economic impacts that will result from the mine's closing, with a strong commitment to environmental stewardship.

This planning is also a collective process, taking into account the opinions and concerns of the community and the results of a social impact study. The multidisciplinary Closure and Transition Team prepared a conceptual plan for the general closure process, analyzing various closure scenarios with respect to environmental, social, economic, safety and legal aspects. These combined efforts resulted in the preparation of an overall Closure Plan which will direct the next steps of developing specific technical closure plans for each of the 10 mining projects implemented during the life of La Libertad Mine.



**TABLE 28** | Integrated Mine Closure Planning

Categories	La Libertad	El Limon	Masbate	Otjikoto	Fekola
Environment	•	•	•	•	•
Society and Community	•	_	-	_	_
Human Resources	•	_	•	_	-
Stakeholder Engagement and Communications	•	_	-	_	-
Land Use Strategy	•	_	-	•	-

B2Gold's aim is to eventually have integrated closure plans at each site that address environmental, socio-economic, regulatory, HR, infrastructure, land use, safety and health, and governance factors.

B2Gold is taking responsibility to ensure our legacies will bring opportunities for future generations.







At our Masbate operation, the importance of progressive rehabilitation is amplified by the fact that up to approximately 30% of the waste rock is potentially acidgenerating. In addition to the objectives of rehabilitation mentioned above, comprehensive design and planning is key to achieving both successful rehabilitation outcomes and minimizing future costs. Masbate has worked to incorporate advanced design and rehabilitation measures into its waste rock storage facilities for several years. The process incorporates input from nearly all disciplines of the operation: from environment and biodiversity, to mine planning and operations, to social and community development and engagement. These advanced measures have been incorporated into our Bangon, Syndicate and HMBE waste rock storage facilities. Today Masbate monitors these to verify effectiveness, and to ensure that we are able to meet agreed success criteria.

Among the numerous measures that we implement, two key measures are the management of potentially acid generating materials to limit the release of pollutants to water resources, and appropriate surface water management to reduce long-term erosion and rapid establishment of vegetative cover to stabilize slope surfaces:

- Potentially acid generating materials are placed within the interior of the waste rock storage materials. Batters are constructed with acid neutralizing materials. Additionally, waste rock is placed in shorter lifts and combined with paddock dumping and dozing in between lifts to limit gas and water movement within the waste rock layers.
- Surface water is managed to slow and direct surface runoff to engineered drainage drop-down structures so that slope surfaces do not experience significant erosion.
- Surfaces are stabilized through a variety of revegetation measures such as hydroseeding, planting of seedlings, and coco-matting based on slope and soil characteristics.

REHABILITATION OF OUR MINE **FACILITIES AND RESTORING LAND** TO AN ACCEPTABLE POST-MINING STATE IS AN INTEGRAL COMPONENT OF OUR SUSTAINABLE DEVELOPMENT STRATEGY. IT'S CRUCIAL FOR **GAINING STAKEHOLDER TRUST AND IMPROVING OUR ACCESS TO LAND** FOR FUTURE MINE SITES.

These progressive rehabilitation measures are monitored. and all indications are that the management of waste rock storage facilities at the Masbate Mine is successfully mitigating the long-term risks associated with the site's waste materials. These measures are industryleading practice and among the best in the Philippines. The operation has received significant acknowledgement and praise from various stakeholders in-country including community leaders and government experts.

These practices were a focus of our global internal HSE Conference held in 2018 (see page 58 for more details.) B2Gold is working to adapt these best practices for improving rehabilitation practices at our sites globally. Our other sites have lower precipitation environments and do not face the same potential acid rock drainage issues encountered at our Masbate operation. However, the principles of surface water management and slope stabilization, and the lessons learned on how to apply a multi-disciplinary approach from the planning to the closure phases of a project can be adapted at all of our operations.

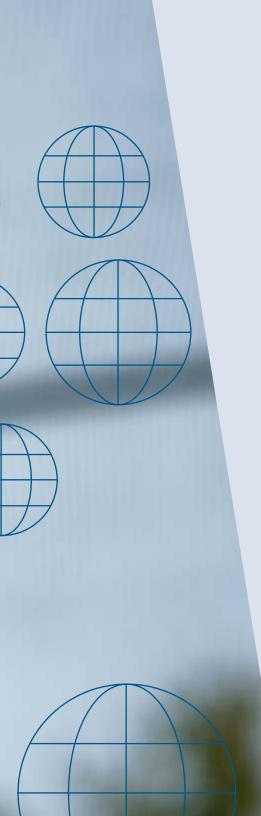
In 2019, expanding these improvements across B2Gold will be a key focus of our project and mine planning. Adopting these techniques will help to reduce future costs, and ensure that we are able to successfully transition land from our mine sites to a stable resource that will provide sustainable community benefits for generations to come.



TABLE 29 | ESG Policies and Management Systems

Category	Policy or Management System	Updated	Reference Location
Governance	Anti-Corruption Policy	March 13, 2018	Internal
	Audit Committee Charter (Board of Directors)	March 13, 2018	www.b2gold.com
	Board Charter	March 13, 2018	www.b2gold.com
	Code of Business Conduct and Ethics	March 13, 2018	www.b2gold.com
	Compensation Committee Charter (Board of Directors)	March 13, 2018	www.b2gold.com
	Corporate Governance and Nominating Committee Charter (Board of Directors)	March 13, 2018	www.b2gold.com
	Health, Safety, Environmental, Social and Security Committee Charter (Board of Directors)	March 13, 2018	www.b2gold.com
	Whistleblower Policy	March 13, 2018	www.b2gold.com
Environmental	Environmental Policy	March 12, 2018	www.b2gold.com
	Biodiversity Policy	March 12, 2018	www.b2gold.com
	HSE Management System Standards	May 24, 2018	Internal
	Environmental and Biodiversity Performance Standards	May 24, 2018	Internal
People	Policy Statement on the Approach to People Management	December 18, 2018	www.b2gold.com
	Occupational Health and Safety (OHS) Policy	May 12, 2018	www.b2gold.com
	HSE Management System Standards	May 12, 2018	Internal
	OHS Performance Standards	June 19, 2018	Internal
	Golden Rules for Safety for B2Gold Operations	March 19, 2014	Internal
	Crisis and Emergency Management Guideline	October 4, 2018	Internal
Society	Social Corporate Responsibility Policy	March 13, 2018	www.b2gold.com
	Social Performance Management System	June 2017	Internal
	Social Performance Standards	June 2017	Internal
	Supplier Code of Conduct Policy	November 13, 2018	www.b2gold.com





**TABLE 30 |** GRI General Disclosures

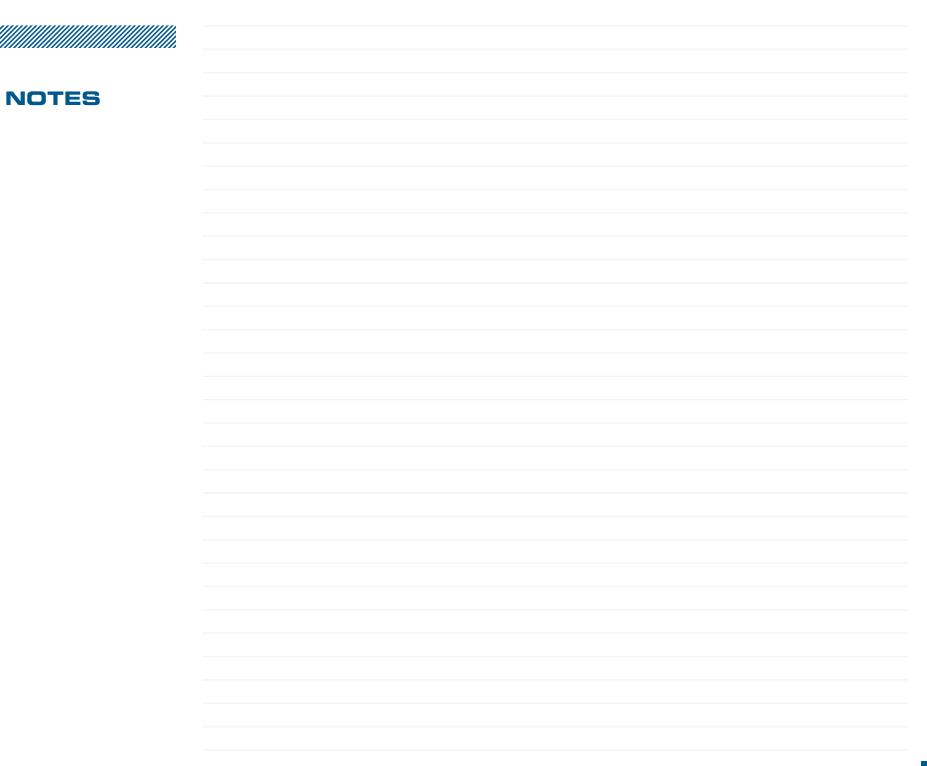
Category	Disclosure	GRI Indicator	Location Reference
Organizational	Name of the organization	102-1	» About us
Profile	Activities, brands, products, and services	102-2	
	Location of headquarters	102-3	
	Location of operations	102-4	
	Ownership and legal form	102-5	
	Markets served	102-6	
	Scale of the organization	102-7	<ul><li>» About Us</li><li>» Our Economic Performance</li><li>» Our People</li></ul>
	Information on employees and other workers	102-8	» About Us » Our People
	Supply chain	102-9	» Our Economic Performance
	Significant changes to the organization and its supply chain	102-10	<ul><li>» About This Report</li><li>» Our Economic Performance</li></ul>
	Precautionary Principle or approach	102-11	<ul><li>» Our Environment</li><li>» Our Communities</li></ul>
	External initiatives	102-12	» About Us
	Membership of associations	102-13	
Strategy	Statement from senior decision-maker	102-14	» Message from CEO
Ethics and	Values, principles, standards, and norms of behaviour	102-16	» About Us
Integrity	Mechanisms for advice and concerns about ethics	102-17	

Governance	Governance structure	102-18	»	About Us
	Delegating authority	102-19		
	Executive-level responsibility for economic, environmental, and social topics	102-20		
	Consulting stakeholders on economic, environmental, and social topics	102-21	<b>»</b>	Various
	Composition of the highest governance body and its committees	102-22	»	About Us
	Chair of the highest governance body	102-23		
Stakeholder Engagement	List of stakeholder groups	102-40	» » »	About Us Our People Our Communities
	Collective bargaining agreements	102-41	» »	Our People Our Communities
	Identifying and selecting stakeholders	102-42	<b>»</b>	Our Communities
	Approach to stakeholder engagement	102-43	» »	About Us Our Communities
	Key topics and concerns raised	102-44	» »	About This Report Our Communities
Reporting Practice	Entities included in the consolidated financial statements	102-45	»	About This Report
	Defining report content and topic Boundaries	102-46		
	List of material topics	102-47		
	Restatements of information	102-48	<b>»</b>	Not applicable
	Changes in reporting	102-49		
	Reporting period	102-50	»	About This Report
	Date of most recent report	102-51	»	About This Report
	Reporting cycle	102-52	»	About This Report
	Contact point for questions regarding the report	102-53	»	Page ii
	Claims of reporting in accordance with the GRI Standards	102-54	<b>»</b>	About This Report
	GRI content index	102-55	<b>»</b>	GRI Index
	External assurance	102-56	»	Page i, Page 3

TABLE 31 | GRI Topic-Specific Disclosures

Category	Disclosure	GRI Indicator		Lo	cation Reference
Economic	Management Approach	103-1, 2, 3	SDG8	<b>»</b>	Our Economic Performance
	Economic Performance	201-1	SDG1 SDG8		
	Market Presence	202-2	SDG8	<b>»</b>	Our People
	Procurement Practices	204-1	SDG1 SDG8	»	Our Economic Performance
	Anti-corruption	205-2	SDG16	» »	About Us Our People
Environmental	Management Approach	103-1, 2, 3		<b>»</b>	Our Environment
	Energy	302-1, 3			
	Water	303-1	SDG14		
	Biodiversity	304-1, 4, MM1	SDG15		
	Emissions	305-1			
	Effluents and Waste	306-1, 2, 3	SDG15		
	Environmental Compliance	307-1	SDG15		
Social: Labour and	Management Approach	103-1, 2, 3	SDG5 SDG8	»	Our People
Decent Work	Employment	401-1, 2, 3	SDG1 SDG5 SDG8		
	Labour/Management Relations	402-1, MM4	SDG8		
	Occupational Health and Safety	403-1, 2, 3, 4	SDG3		
	Training and Education	404-2, 3			
	Diversity and Equal Opportunity	405-1, 2	SDG5 SDG8		

Social:	Management Approach	103-1, 2, 3	SDG16	» Our Communities
Human Rights	Non-discrimination	406-1	SDG5 SDG16	<ul><li>» Our People</li><li>» Our Communities</li></ul>
	Freedom of Association and Collective Bargaining	407-1	SDG16	<ul><li>» Our People</li><li>» Our Communities</li></ul>
	Child Labour	408-1	SDG16	<ul><li>» Our Economic Performance</li><li>» Our People</li><li>» Our Communities</li></ul>
	Forced and Compulsory Labour	409-1	SDG8 SDG16	<ul><li>» Our Economic Performance</li><li>» Our People</li><li>» Our Communities</li></ul>
	Security Practices	410-1	SDG16	» Our Communities
	Human Rights Assessment	412-1, 2, 3	SDG16	» Our Communities
Social: Society	Management Approach	103-1, 2, 3	SDG1 SDG8 SDG16	» Our Communities
	Local Communities	413-1, 2	SDG1 SDG5 SDG8 SDG16	» Our Communities
	Supplier Social Assessment	414-2	SDG16	<ul><li>» Our Economic Performance</li><li>» Our Communities</li></ul>
	Emergency Preparedness	G4-DMA	SDG3 SDG16	» Our People
	Artisanal and Small-Scale Mining	MM8	SDG1 SDG16	» Our Communities
	Resettlement	ММ9	SDG1 SDG8 SDG16	» Our Communities
	Closure Planning	MM10	SDG15	» Our Communities





**NOTES** 



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