



CENTAMIN

CREATING
SUSTAINABLE
VALUE

Sustainability report 2018



Centamin plc is a leading mineral exploration, development and mining company and Egypt's largest gold producer.

CONTENTS

Foreword	1
Sustainability highlights in 2018	2
Contributing to the SDGs	4
Sustainability KPIs	6

CHAPTER ONE – GOVERNANCE

1: Sustainability governance	8
1.1 A top-down framework for sustainability	8
1.2 Key sustainability policies	10
1.3 Payments to government and taxes	11
1.4 Stakeholder engagement	12
1.5 Grievance management	12
1.6 Materiality assessment – identifying what matters most to stakeholders	12

CHAPTER TWO – OUR PEOPLE

2: Prioritising people	16
2.1 Talent management	16
2.2 Training	17
2.3 Ensuring a safe working environment	18
2.4 Developing strong and stable industrial relations	21
2.5 Gender and diversity	21

CHAPTER THREE – OUR COMMUNITY

3: Building mutually beneficial relationships with local communities	22
3.1 Contributing to community development	24
3.2 Building additional economic benefit through the supply chain	25
3.3 Closure planning	27

CHAPTER FOUR – OUR ENVIRONMENT

4: Responsible environmental stewardship	28
4.1 Environmental incidents	28
4.2 Energy and emissions management	30
4.3 Managing water use	32
4.4 Managing biodiversity	33
4.5 Waste management	33
4.6 Responsible management of hazardous waste	34
4.7 Managing air quality	34

APPENDIX

Appendix: GRI Content Index 2018	36
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Foreword

From ensuring the highest levels of safety and skills for its workforce to improving socio-economic and environmental development within its host countries, operating in a socially responsible way is not always straightforward but is a strategic priority for Centamin

Andrew Pardey
CEO



This is Centamin's second stand-alone Sustainability Report, and it details how we continue to evolve our efforts to ensure we operate safely and in an environmentally and culturally sensitive manner. It sets out the challenges we have faced, how they have left the business stronger and more resilient and our forward-looking plans to build on these strong foundations both in Egypt and in our expanding work in West Africa.

Safety and skills

I was proud that last year the Company continued its impressive safety record, driving lost time injury rates down to 0.07 per 200,000 hours for the Sukari operation (Group LTIFR of 0.06) and recording just two lost time injuries with over 6.4 million man-hours worked during the year. Through a focus on skills training, individual development and high levels of local employment and procurement, Centamin's Sukari mine has also continued to take a leadership role in the mission to modernise the wider mining sector in Egypt and make it one of the world's leading gold producers. Beyond the mine, we are also reaching out through scholarships and student engagement.

A key focus area during 2018 has been on evaluating the use of solar capacity at Sukari, Egypt. A feasibility study is underway to complete a 40MW(AC) Solar farm with a view to seeking Board approval in 2019 for a phased installation starting with a 15MW(AC) plant to feed into the micro-grid at Sukari Mine.

Digging deeper into governance of sustainability

One of the most important developments of 2018 has been a shift in many of our sustainability governance processes. Throughout the year we worked with external consultants to review and update our policies and procedure on human resources, stakeholder engagement, grievance mechanisms and on minimising the risk of Modern Slavery in our supply chain. Many of the recommendations from these initiatives are now starting to be rolled out in both Egypt and West Africa.

Improved governance of sustainability will form an even stronger foundation for our continued efforts on environmental and social issues in the coming year, alongside our rapidly evolving work to build a sustainable supply chain and implement a robust community development framework. Ultimately the success of our Company is dependent on ensuring we have world-class standards to foster health and prosperity among our host communities, protect our employees and to protect the natural environment.

We look forward to meeting that challenge in 2019.

Andrew Pardey
CEO

Sustainability highlights in 2018

Our sustainability initiatives developed throughout 2018 aim at helping the local communities and protect the natural environment in which we operate.



73%

drop in LTIFR (76% drop in Group LTIFR) 2017-2018



Solar

completion of a competitive tender to appoint solar farm developer Bre-Gen



38.9%

of all water recycled through the plant



95 Take5

average of 95 Take5 prestart micro-risk assessments completed every day



33% reduction

in all environmental incidents in 2018, including zero major environmental incidents in 2018.



58% Egyptian

suppliers at Sukari by number, up from 45% in 2017



c.\$745,000

invested in community development projects in 2018



Scholarship

established a programme for geology students at University of Alexandria, Egypt and in the UK.



Partnership

with GIZ to encourage and promote agribusiness in Côte d'Ivoire established

Scope and boundary of this report

Unless otherwise noted, this report primarily covers the Sukari Mine in Egypt, which currently is Centamin's only operational site. However reference is made to exploration activities in Burkina Faso and Côte d'Ivoire, where they are material or to provide context and demonstrate how sustainability issues are considered throughout all Centamin's activities and business decisions.

Data presented covers Centamin's performance for the 2018 calendar year, which corresponds with the company's financial year. Where noted, references may be made to historical results. All financial figures are quoted in United States dollars unless otherwise noted. This report has been prepared in accordance with the GRI Standards and the mining and metals supplement: Core option. The most recent annual report was published in March 2019.

Sustainability is of growing importance to Centamin's local communities and all stakeholders, whether they are local people, global shareholders or our employees. Centamin wants to use the reporting process as a mechanism for monitoring and improving its sustainability performance both now and as the company grows. Centamin welcomes feedback on any aspect of this report. For further information please contact the Group Sustainability Manager – Doaa Abou Elailah – Doaa@centamin.com.

Contributing to the SDGs

The Sustainable Development Goals (“SDGs”) were launched by the United Nations in September 2015 as a universal call to action to address some of the world’s most pressing sustainability issues.



The SDGs set out an ambitious set of goals aimed at ending poverty, improving health and well being, ending inequality and protecting the planet.

Centamin has not formally adopted the SDGs as business targets, but recognises that meeting the ambitions they set out requires the cooperation of governments, civil society and businesses around the world and therefore Centamin is working where possible to align its efforts to bring about positive social, economic and environmental outcomes with the SDGs. In 2019 Centamin will consider working to further align its community development programme with the SDGs.

These pages set out a snapshot of how Centamin contributes to this important framework.



SDG 3

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

The health and safety of people is Centamin’s top priority. Centamin ensures healthy workplaces and promotes well-being as well as creating safe working environments. As part of Centamin’s community development work Centamin supports number of health and well-being initiatives in the community. Examples of this contribution include:

- Paying the medical expenses for local Bedouin people near the Sukari Gold Mine in Egypt.
- Supporting local hospitals by providing essential equipment.
- Improving access to health services in rural Africa by providing clinics near exploration sites in Burkina Faso and Côte d’Ivoire with vaccines and anti-venoms.



SDG 4

Ensure inclusive and equitable quality education and promote lifelong learning

Having a highly trained and skilled workforce is critical to Centamin’s on-going success, and the company provides learning opportunities for all and invests in both employee and community education. Examples of this contribution include:

- Building classrooms and providing equipment to schools in Burkina Faso, Côte d’Ivoire and Egypt.
- Partnering with colleges and universities to provide internships and scholarships.
- Providing a range of training and development opportunities to all employees.



Solar panels in use on remote location.



SDG 6

Access to water and sanitation

Water is essential to Centamin's business and host communities. Centamin is committed to using water as efficiently as practicably possible and to maximising water recycling on site. Centamin also helps to improve and provide access to clean water and sanitation in communities nearest operations. Some examples of this contribution include:

- Building sanitation services for Doropo school in Côte d'Ivoire.
- Providing water supplies to local Bedouin near Marsa Alam.

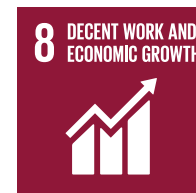


SDG 7

Ensure access to affordable, reliable, sustainable and modern energy for all

Energy is also essential to Centamin's operations. Centamin looks to maximise its usage of clean energy where possible and to pass on the benefits to host communities. An example of this contribution includes:

- Feasibility study underway to complete a 40MW(AC) Solar farm at Sukari in Egypt with a view to seeking board approval in 2019 for a phased installation starting with a 15MW(AC) plant.






SDG 8

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Centamin is committed to building the prosperity and employment opportunities of its host countries and communities. Centamin provides work for host communities with full and productive employment to fight against poverty and encourage economic growth. Examples of this contribution include:

- 95% of employees at Sukari Mine are Egyptian nationals, with 50% drawn from Upper Egypt, where the Sukari mine is located.
- Investing in extensive training to enable employees to develop the skills needed to run a world-class gold mine and wider efforts to modernise Egypt's mining sector.
- Assisting with income generating initiatives in local communities such as the Batié Women's Association platform.

Sustainability KPIs

ASPECT	2018	2017	2016	PERFORMANCE	TARGET
Ensure robust safety standards that protect the workforce every day					
Lost time injury rate, per 200,000 hours worked	0.07	0.26	0.27		To keep LTIFR below 0.20
Medical injury frequency rate per 200,000 hours worked	0.55	0.40	0.46		0.35 by 2022
Build and maintain a highly skilled and motivated workforce					
Skills training (average levels of training received by each employee in days) ⁽²⁾	1.6	3.8	4.7		Improve levels year-on-year
Responsibly manage and minimise the environmental impact of Centamin's activities					
Environmental incidents	0	0	0		No level 4 or 5 environmental incidents each year
Water recycling (relates to the reuse of sea water from the TSF through the plant)	38.4%	53.16%	44.76%		To recycle at least 50% of all process water. To recycle 60% of process water by 2021
Emissions intensity	⁽¹⁾	34.37	34.22		34.0 CO ₂ -e / ton milled by 2020
Improve socio-economic development in countries of operation, and improve the standard of living and well-being for host communities					
% host country Nationals employed	95%	95%	—		For at least 90% of the workforce to be host country nationals
Total local procurement spend	\$126.5m	\$49m	\$73m		To increase procure spend with host country suppliers each year in line with production

(1) Centamin's CO₂ calculations are currently calculated and verified in quarter two as part of disclosure to CDP. During 2019 Centamin will work to ensure the calculation and verification of emissions data takes place in early quarter one to align with annual reporting.

(2) Excludes mandatory internal training.

Key:

-  Achieved
-  On target
-  Not yet achieved



Chapter one:

Sustainability governance

Our vision: To ensure accountability, transparency and board level oversight of sustainability, through managed reporting on all material environmental and social issues.



Alison Baker

Chair of the HSES Committee

Centamin's strength as a business relies on the health and welfare of its workforce, the well-being of its local communities and host countries and the environment in which it operates. That is why from construction to closure the Company aims to entrench sustainability best practice and good corporate citizenship into all business processes, our corporate culture and our values.

1.1 A top down framework for sustainability

Centamin's governance of sustainability starts at the top, and the board of Directors have ultimate responsibility for the implementation and management of Centamin's sustainability policies. The board is supported by a dedicated Health, Safety, Environment and Sustainability

committee (HSES Committee), which oversees the company's overall approach to sustainability, as well as developing and implementing short and long-term policies and standards. The committee provides support to the Board by monitoring the Group's safety record, sustainability performance and ethical conduct, and provides advice on all operational and community linked sustainability issues. The Health, Safety, Environment and Sustainability Committee comprises of three board members: Alison Baker (Chair), Edward Haslam, and Dr Ibrahim Fawzy. Dr Fawzy joined the committee in January 2019, replacing Mark Bankes. The committee meets four times a year.

During 2018, some of the initiatives the board has overseen include:

- A review and update of Centamin's approach to stakeholder engagement.
- The development of a formal community grievance mechanism.
- A review of the current approach to employee grievances and development of a formal employee grievance procedure.
- A review of Centamin's practices in compliance with the UK Modern Slavery Act and appropriate steps to ensure Modern Slavery does not exist within the supply chain.
- Feasibility study underway to complete a 40MW(AC) Solar farm at Sukari in Egypt with a view to seeking board approval in 2019 for a phased installation starting with a 15MW(AC) plant.





During 2018, the board also reviewed the changes to the UK government's Corporate Governance Code, in particular provision five, which sets out new requirements for a company's engagement with its workforce. In response to the new requirements, Centamin has decided the HSES committee will have responsibility for ensuring appropriate and compliant communication with the workforce. Activities as part of compliance will also include:

- Ensuring there is a forum through which employees can share their ideas and raise concerns.
- Ensuring management provide and appropriately communicate feedback on all complaints and concerns raised.
- Ensuring and communicating how the employees voice has been heard in the boardroom.
- Determining if staff are comfortable challenging and reporting issues of concern.

As illustrated in the infographic, responsibility for sustainability at Centamin cascades from the board to the Health, Safety, Environment and Sustainability Committee to group level executives, heads of department, and onto site based teams.

How sustainability governance cascades at Centamin



At group level, responsibility for implementing Centamin's sustainability objectives is held by the sustainability manager Doaa About Elailah, who reports to the CEO. The day-to-day management of sustainability at all operations and exploration sites rests with the dedicated HSES teams, who are responsible for the delivery of all community, safety and environmental initiatives and drive individual site performance. Further details on Centamin's corporate governance approach are also available in the detailed corporate governance section of the annual report.

Linking sustainability to performance pay

To reflect Centamin's commitment to sustainability, during 2018 sustainability performance and KPIs were integrated into the CEO's annual bonus and long-term incentive schemes. A portion of the CEO's annual bonus is now dependent on the group achieving zero major environmental incidents and improvement on the safety targets. Onsite employees also receive a bonus for the successful achievement of health and safety targets.

Sustainability governance continued

Priorities for 2019

During 2019 Centamin will undertake a formal review of its sustainability-related policies to ensure compliance with international standards and best practice. Other key priorities for Centamin in 2019 include:

- **Safety:** Continue to drive safety initiatives including management walk-about, efforts to reduce road safety and vehicle related incidents, detailed investigations of all high potential incidents, ensuring all contractors are included in company safety initiatives and continuous improvement in pre-task assessments.
- **Community:** Finalise the implementation of the new stakeholder engagement programme and community grievance mechanism. See section 1.4 for more details.
- **People:** Introduce new assessments of all high potential employees, develop individual development plans, and roll out of KPIs to the Superintendent level. Finalise new human rights and supply chain policies to be implemented on-site at Sukari.
- **Environment:** Feasibility study for a solar farm at Sukari Mine. Complete construction of the final lift of the operating tailings storage facility ("TSF"), and to complete detailed designs for the construction of the new TSF.

1.2 Key sustainability policies

Centamin's commitment to sustainability is set out through a suite of sustainability policies, procedures and management systems. Centamin's policies have been drafted to comply with or exceed the minimum requirements of host country legislation, and to align with the International Finance Corporation ("IFC")'s Performance Standards.

Centamin's policies, including the Code of Conduct, are readily available both on the Centamin [website](#) and on site where they are provided in both English and Arabic for workers at the

Sukari Mine in Egypt, and in French for employees in West Africa.

- **The Code of Conduct:** The Code of Conduct is the bedrock of Centamin's approach to sustainability. It sets out the standards and principles to which all employees and suppliers are accountable. This includes norms of ethical business behaviour, such as whistle-blowing, conflicts of interest and anti-discrimination. The Code is taught to all employees, and contractors as part of induction training. Contravention can lead to disciplinary action and/or termination of employment.
- **Health, Safety and Environment ("HSE") Policy:** The HSE policy sets out Centamin's approach to health, safety and the environment. It compels compliance with all relevant local legislation and aligns with both the conditions of Centamin's licences and permits and international best practice standards. It also sets out the necessary control measures for the responsible management of critical natural resources such as water; and ensures our negative impacts to the environment are minimised as far as practicably possible.
- **Corporate and Social Responsibility Policy:** The Corporate and Social Responsibility policy outlines the standards by which the company operates and provides a good corporate citizenship guide for the Company. It compels compliance with all applicable law and regulations in jurisdictions of operation. To meet the requirements of all applicable standards, and to be transparent, ethical, fair and honest in all dealings, and to treat individuals with respect. It also sets out Centamin's commitment to respect and uphold fundamental human rights and the culture, customs and traditions of those impacted by Company activities.

- **Diversity Policy:** The Diversity policy sets out Centamin's commitment to diversity, Centamin appoints all employees on the basis of merit. However the company also recognises that women often face additional challenges in the mining sector, thus we actively encourage women to apply for positions including at management level and as part of succession planning are committed to developing a pipeline of female talent across all countries of operation and at group level.
- **Anti-corruption and Bribery Policy:** The policy makes clear that Centamin has zero-tolerance to any form of bribery or corruption. It sets out the processes employees, contractors and company representatives must follow to minimise the risks of bribery and corruption occurring within the value chain. For example, anti-corruption clauses are included in all commercial agreements and extend to any sub-contractor arrangements.
- **Whistleblower Policy:** Centamin's Whistleblower Policy sets out the whistleblowing procedures available throughout the organisation. This includes reporting procedures and steps for escalation. Centamin's whistleblowing policy first encourages workers to raise any concerns they may have with their immediate supervisor or a member of site management for first instance investigation and action. Reporting can be escalated to the board of Directors if initial investigation is unsatisfactory. The policy also includes a non-victimisation provision for all reports made in good faith.

This sustainability report details how these policies are put into practice, and the Company's performance against them.



1.3 Payments to government and taxes

Centamin does not engage with political processes or make any political contributions. In line with Toronto Stock Exchange requirements, all payments to government are fully reported and disclosed through the annual Extractive Sector Transparency Measures Act ("ESTMA") declaration, which is available online.

Centamin regards itself as a trusted partner for all host countries and the Egyptian government holds a 50% stake in the Sukari Mine.

As shown in figure I Centamin's total economic value distributed in Egypt in 2018 was \$98.7m, including profit share, corporate taxes, royalties and licence fees to the Egyptian Government. Centamin also paid more than \$916,000 in licence fees to the governments of Burkina Faso and Côte d'Ivoire.

These figures are fully reported in the annual report, and online as part of the annual ESTMA declaration.

The tax rates Centamin pays is determined by the relevant national, provincial and regional authorities. For example, as part of the Sukari Concession Agreement the Egyptian government receives a 3% royalty and 50% of the profits (after recoverable expenses and royalties are deducted).

Figure I: Payments to the government

	2018 \$US				Total
	Egypt	Burkina Faso	Côte d'Ivoire		
Profit share paid	76,390,698	—	—		76,390,698
Corporate and indirect taxes	1,161,773	—	—		1,161,773
Royalties	21,004,328	—	—		21,004,328
Exploration licence fees	—	67,919	21,566		89,485
Mining and other licence fees	150,358	827,099	—		977,457
Infrastructure improvements	—	—	—		—
Total economic value distributed	98,707,157	895,018	21,566		99,623,741

	2017 \$US				Total
	Egypt	Burkina Faso	Côte d'Ivoire	Australia	
Profit share paid	111,629,332	—	—	—	111,629,332
Corporate and indirect taxes	997,048	—	—	1,550,333	2,547,381
Royalties	19,334,126	—	—	—	19,334,126
Exploration licence fees	—	148,267	35,253	—	183,520
Mining and other licence fees	1,057,361	833,666	—	—	1,891,027
Infrastructure improvements	350,000	—	—	—	350,000
Total economic value distributed	133,377,866	981,933	35,253	1,550,333	135,935,986

Sustainability governance continued

1.4 Stakeholder engagement

From exploration to closure, ensuring strong, respectful and mutually beneficial relationships with all stakeholders is critical to Centamin's success as a business. To ensure a best practice approach to stakeholder engagement, during 2018 Centamin worked with external consultants to review its Stakeholder Engagement Plan (SEP) and to develop a formal SEP for the Sukari Mine that complies with Egyptian legislation, IFC Performance Standards and Company policies. Details of this work are explained in the box 'Reaching out to all'.

Reaching out to all: Implementing a formal stakeholder engagement plan

During 2018, Centamin worked with external consultants to review, update and formalise the SEP at Sukari Mine to ensure it aligns with international standards including IFC Performance Standards and the Equator Principles. Establishing a formal SEP will ensure engagement with stakeholders is consistent, culturally appropriate and strategic.

The outcomes of this work will help Centamin to ensure that:

- It builds sustainable relationships with host communities and other stakeholders that are based on transparency and trust.
- Inaccurate perceptions or unrealistic expectations regarding operational impacts and benefits do not take root.
- Affected people and communities are involved in decisions that will affect them.
- Affected people have a clear and consistent forum to voice any concerns regarding mine activities.
- Effective consultation with the relevant government departments occurs.

The work of implementing the new SEP at Sukari has already started, and will continue into next year. The plan has been designed to be dynamic with the capacity to evolve over time.

1.5 Grievance management

Grievance management is an important part of Centamin's interactions with local stakeholders and the company's governance of sustainability. Until this year, any grievance at Sukari Mine was reported and referred to the Security and PR department for resolution.

The Director of Security maintains an open door policy on-site, and also makes himself available to meet with community members at a public space in the local town of Marsa Alam most evenings. If an issue cannot be easily resolved then it is escalated to operational management level and the Sukari General Manager for consideration.

At Centamin's exploration sites in West Africa, grievances are dealt with by project community officers, and escalated to the site manager for resolution if necessary.

During 2018, Centamin worked to update and formalise the onsite grievance procedures and mechanisms at Sukari to ensure they comply with the requirements of the Equator Principles and IFC standards. This includes establishing a formal grievance register, refining the reporting lines and responsibilities and a time line for resolving any grievance.

1.6 The materiality assessment – Identifying what matters most to stakeholders

During October 2018, in line with Global Reporting Initiative (GRI) requirements and to identify the sustainability issues most important to stakeholders, Centamin conducted a materiality assessment update.

Process

The materiality update process consisted of the following steps. For internal stakeholders a new materiality survey was conducted. Heads of key departments and the executive management team were presented with a list of 27 issues linked to sustainability and asked to score each issue from one to five based on potential impact to Centamin's business. This is a complete update of last year's scores.

For external stakeholders, a shorter update process was undertaken. To update external responses, feedback from recent community interviews, any feedback from investors, or from investor engagements, 2018 proxy voting guidelines and identified priority issues from investor responsible investment and ESG policies were integrated into the 2018 external materiality survey data, to produce a new set of priority issues. In 2019 a full external materiality survey will be conducted.

Results

As shown on the materiality matrix below, in 2018 there were four issues which are identified as high priority, and a further nine issues were identified as medium priority.

Centamin's high priority issues for 2018 were:

- Safety
- Energy efficiency
- Environmental incidents
- Ensuring stable secure power supply

And the medium priority issues for 2018 were:

- Revenue transparency
- Management of hazardous waste
- Anti-bribery and corruption
- Emergency preparedness
- Skills training and staff development
- Purchasing from local suppliers
- Water efficiency
- Climate change
- Air pollution
- Human rights

Other issues discussed and considered as part of this process include levels of local employment and infrastructure, diversity, the need for ethical business conduct, fair levels of wages, legacy planning, community and labour relations, respecting freedom of association, modern slavery, ensuring robust and accessible grievance mechanisms and protecting water quality and biodiversity.

By identifying and comparing the differing priorities between both internal management and external stakeholders, this exercise has also proved a useful tool to help Centamin's executive management team understand stakeholders' needs.

Figure II: Centamin's most material issues



Sustainability governance continued

STAKEHOLDER ENGAGEMENT



Community

Issues raised	Centamin response
<ul style="list-style-type: none"> • Safety 	Centamin aims to have the highest possible safety standards, and in 2018 the lost time injury frequency rate was 0.07 per 200,000 hours for the Sukari operation – a historic low.
<ul style="list-style-type: none"> • Emergency preparedness 	Centamin complies with international best practice for emergency preparedness. There are robust emergency plans and procedures in place at all operations, and mock drills are conducted regularly.
<ul style="list-style-type: none"> • Environmental incidents 	Centamin implements robust environmental management plans at all operations, and there have been no significant environmental incidents in corporate history.
<ul style="list-style-type: none"> • Local supply and procurement • Local economic development 	Centamin uses its supply chain and purchasing power to foster local economic development in 2018 procured more than \$126m in goods and services from local suppliers.

Issues raised	Centamin response
<ul style="list-style-type: none"> • Human rights & Children's rights 	Centamin is undertaking a risk assessment of its supply chain to identify any modern slavery or other forms of human and child's rights abuses that may occur in the supply chain.
<ul style="list-style-type: none"> • Climate Change 	Centamin reports its GHG emissions to CDP and in 2018 completed a formal tender engaging a solar developer to design and install a solar farm at the Sukari Mine.
<ul style="list-style-type: none"> • Water management 	Centamin reports its water use data to CDP and in 2018 38% of water used was recycled. In 2019 Centamin will implement an active site water balance at the Sukari Mine to identify where further efficiency gains may be possible.
<ul style="list-style-type: none"> • Corporate Governance 	Centamin strives to maintain the highest standards of corporate governance and as part of this in 2019 will be undertaking a review of all corporate policies to ensure they meet best practice and the company's business needs.



Shareholders



How we engage

COMMUNITY
<ul style="list-style-type: none"> • Regular & ad-hoc meetings with Head of Security and PR dept. and Group Head of Sustainability • Interviews held as part of SEP update. • Materiality process

SHAREHOLDERS
<ul style="list-style-type: none"> • Road-shows • Press releases • Conferences • The company AGM • Materiality process • Responding to investor and research provider questionnaires



Government

Issues raised	Centamin response
<ul style="list-style-type: none"> • Safety 	Centamin aims to have the highest possible safety standards, and in 2018 the lost time injury frequency rate was 0.07 per 200,000 hours for the Sukari operation – a historic low.
<ul style="list-style-type: none"> • Emergency preparedness 	Centamin complies with international best practice for emergency preparedness. There are robust emergency plans and procedures in place at all operations, and mock drills are conducted regularly.
<ul style="list-style-type: none"> • Energy efficiency 	Efficient use of energy is a key priority for Centamin, and the company strives to maximise energy efficiency on site to the extent practicably possible.
<ul style="list-style-type: none"> • Air pollution 	As part of environmental monitoring Centamin monitors a range of air emissions and focuses on the suppression of dust on site – through regular spraying of key roads and crushing equipment.

Issues raised	Centamin response
<ul style="list-style-type: none"> • Maintaining the highest levels of safety and occupational health 	Centamin aims to have the highest possible safety standards, and in 2018 the lost time injury frequency rate was 0.07 per 200,000 hours for the Sukari operation – a historic low.
<ul style="list-style-type: none"> • Training provision 	Centamin provides regular training to all employees to ensure it has the skills to continue operations now and in the future. In 2018 each employee received 1.6 days external training.
<ul style="list-style-type: none"> • Levels of employment given to local communities 	In 2018 95% of Centamin's employees were draft from local or national communities



Employees



Suppliers and Contractors

Issues raised	Centamin response
<ul style="list-style-type: none"> • Local supply and procurement 	Centamin aims to using its purchasing power to foster local economic development in 2018 procured more than \$126m in goods and services from local suppliers.
<ul style="list-style-type: none"> • Discussion on how contractors can comply with Centamin's Modern Slavery statement 	In 2018 Centamin worked to ensure it is taking appropriate steps to reduce the risk of modern slavery occurring either on site or within its supply chain.



GOVERNMENT

- Formal meetings and correspondence
- Materiality process
- EMRA representatives onsite at Sukari



EMPLOYEES

- Regular HR discussions about salary levels, transparency and worker benefits.
- Union representation
- Materiality process



SUPPLIERS AND CONTRACTORS

- Formal meetings and correspondence
- Procurement and contracting
- Materiality process

Chapter two:

Prioritising people

Our vision: A zero harm workplace with world-class standards of well-being and training, and opportunity for all

95% of employees at Sukari Mine are Egyptian nationals, with 50% drawn from Upper Egypt, where the Sukari mine is located

Employees received an average of 1.6 days external training in 2018

All Human Resources policies and procedures reviewed and updated

Whether labourers or lawyers, metallurgists or management, Centamin's human capital is the bedrock on which the business is built. It is therefore one of Centamin's highest priorities that the workforce is well trained, diverse, satisfied in their job and go to work each day confident that the highest safety standards and measures are in place to prevent and reduce the likelihood of injury or occupational illness occurring.

2.1 Talent management

Centamin's approach to human resources is to attract, develop and retain the highly skilled workforce required to run world-class operations, with emphasis placed on recruiting and developing the local and host country talent pool, to the extent possible. Part of Centamin's approach to developing local and host country talent includes partnering with national universities to provide scholarships and work experience for top performing students each year.

A number of business benefits arise from this approach. First and foremost, it helps to integrate the community into the mine and receive benefit from its presence; this helps cement the company's social licence to operate. Secondly it helps the company to maintain a competitive cost base.

Prioritising local and national recruitment



- From Marsa Alam or Upper Egypt where the mine is based
- Egyptian Nationals
- Global

Performance

Egyptian law caps the number of non-Egyptians employed by a company at 10% of the workforce. As shown in figure III just over 5% of employees at the Sukari Mine are non-nationals. Approximately 50% of Sukari Mine employees are from Upper Egypt and the Red Sea Protectorate – the region where the Sukari Mine is situated.

The remote location of the exploration projects in Burkina Faso and Côte d'Ivoire, coupled with this specialist knowledge required for successful gold exploration means that employing local people is more challenging, however as shown in the table below, in 2018 Centamin employed 73 West African locals, and had a combined (employees and contractors) West African workforce of 112.



Staff at site-based IT department in Sukari.

Figure III: Workforce

	Total	Corporate office	Egypt		Burkina Faso		Côte d'Ivoire		
		Jersey	Expat	National	Expat	National	Expat	National	
Employees									
Male	1,473	9	72	1,329	2	14	5	42	
Female	24	3	1	3	0	5	0	14	
Total	1,497	12	73	1,332	2	17	5	56	
Contractors									
Male	835	—	96	689	0	0	15	35	
Female	5	—	1	0	0	0	0	4	
Total	840	0	97	689	0	0	15	39	
Total combined workforce	2,337	12	170	2,021	2	17	20	95	

2.2 Training

A fundamental part of Centamin's approach to human resources is to invest in training to enable employees to develop the skills needed to run a world-class gold mine, stay up-to-date with industry innovations and best practice. At Sukari Mine it is also an important part of Centamin's contribution to the wider efforts to modernise Egypt's mining sector, which is under developed despite a long history of gold mining in the country.

The type of training Centamin offers employees can vary from soft management or administrative skills to technical skills and task specific skills, depending on the individual's needs and the company's strategic

requirements. The way in which training is delivered also varies widely – from informal on the job learning and skills shadow training led by onsite expats, to formal onsite classroom training provided by accredited training providers, or specialist offsite and overseas training programmes.

Performance

In 2018 Centamin provided formal training on issues from fire fighting to food hygiene. As seen in figure IV, in 2018 all employees received an average of 1.6 days training each. This is a significant reduction on levels in previous years, the downturn is in part due to the consolidation of some training courses, such as fire extinguisher training which has been

integrated into Centamin's general induction training. The validity of Centamin's general induction training has been extended to two years, from one year, this also contributes to the reduction in training days delivered during 2018.

Figure IV: Average training days per employee Sukari Mine

	2018	2017	2016
	1.6 ⁽¹⁾	3.8 ⁽¹⁾	4.7 ⁽¹⁾

(1) Excludes mandatory internal training.

Prioritising people continued

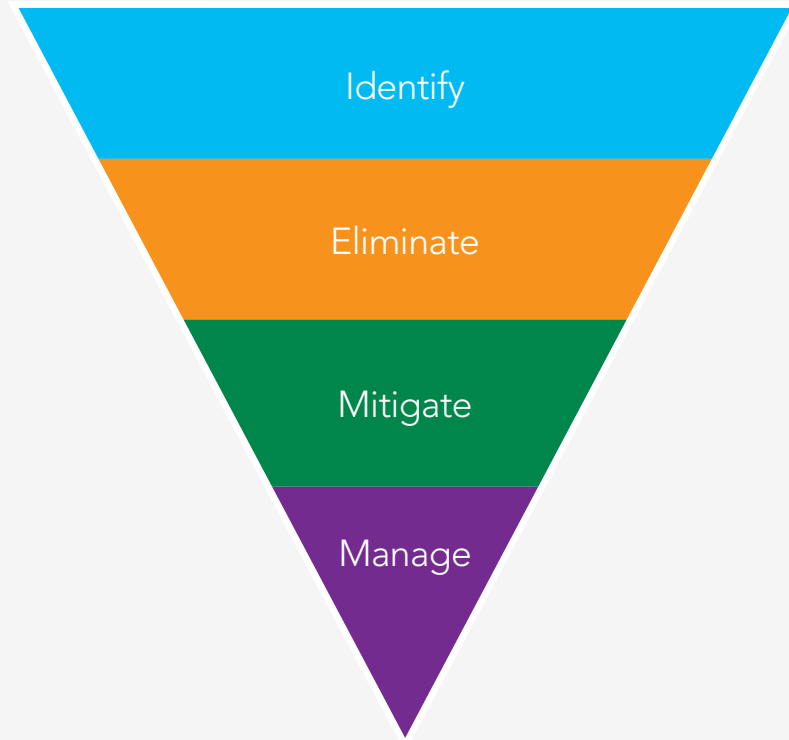
2.3 Ensuring a safe working environment

Mines are dynamic and complex operating environments, with heavy vehicles and equipment in constant use, a number of hazardous chemicals used, and vast quantities of materials moved. This means they are inherently dangerous workspaces and failure to implement robust safety mechanisms and procedures can result in serious injury or even loss of life. This is why Health and Safety is a top priority for Centamin.

Centamin's health and safety policies and procedures aim to minimise and eliminate the risk of fatalities and life-altering injuries, and to continually reduce the number and frequency of injuries on site. The Health, Safety and Environment (HSE) policy and its associated procedures are underpinned by the principle of shared responsibility and designed to ensure all employees are responsible for the creation of a safe working environment for themselves and their colleagues.

Centamin's HSE policies are implemented through a rigorous set of safety systems and procedures that comply with all relevant host country laws. As shown in the infographic below, Centamin's safety procedures utilise a 'hierarchy of control' approach.

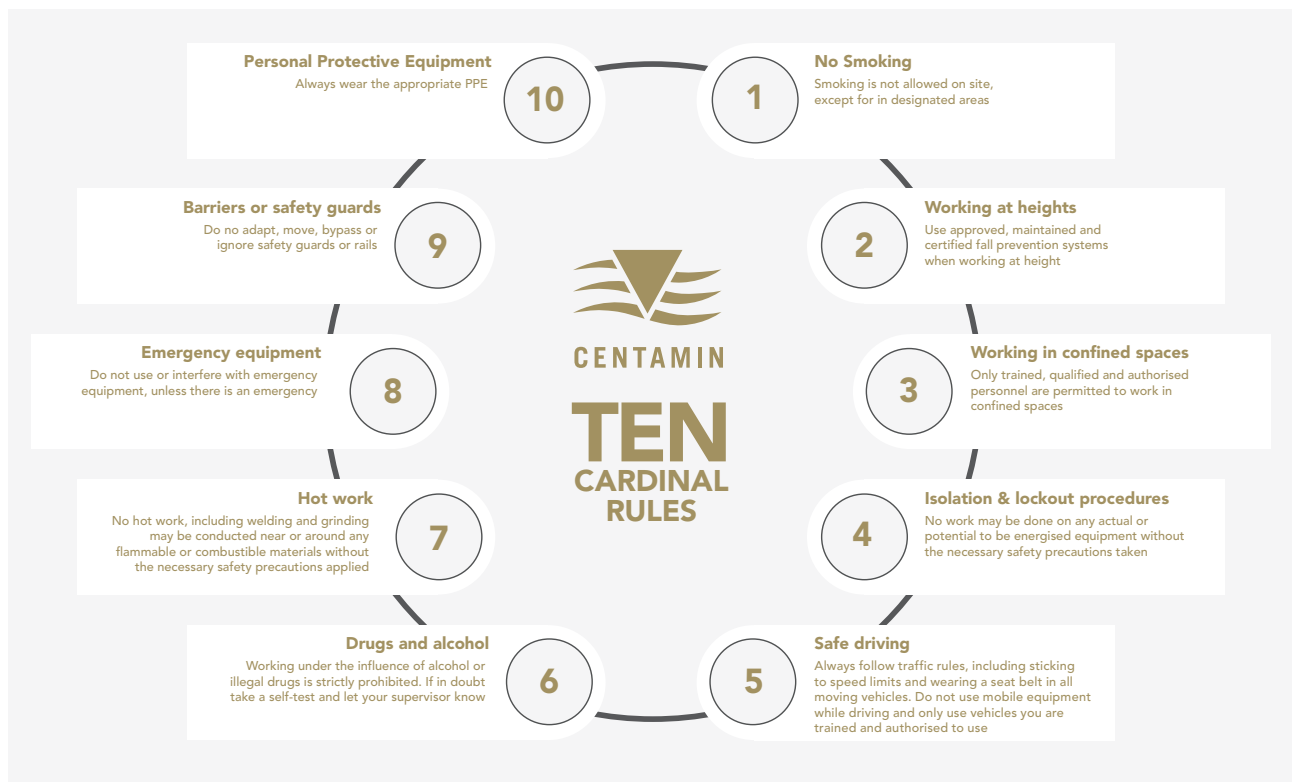
Figure IV: Safety hierarchy of control



- 1 Identify** the hazards
- 2 Eliminate** or remove the hazards
- 3 Mitigate** those hazards which cannot be eliminated, use technology and engineering to minimise exposure to risk.
- 4 Manage** those hazards that cannot be mitigated through careful administration and monitoring – including the compulsory use of personal protective equipment (PPE).

Centamin's HSE policies and procedures are taught to all staff, contractors and visitors as part of site induction training. The length of induction training is tailored to the length of time to be spent on site. Visitors who are on-site for short periods receive simplified shortened induction training – which covers the key points. While employees and contractors who will be on site for longer undertake a day-long induction, which sets out all safety procedures and responses in-depth, and includes training on the ten cardinal rules (see infographic below).

Figure V: Ten Cardinal Rules



Staff and contractor training is updated annually and the date of an employee's most recent health and safety training is recorded and tracked. Having the most current HSES training as relevant is part of the employee bonus scheme. Centamin expects the same high safety standards of contractors as it does of its employees. For example all contractors are required to attend the same general and area inductions and HSE training for their work areas as direct employees, and the monthly work area inspections by the Sukari HSE department also extend to contractor work areas. To ensure Centamin's safety standards are understood and implemented by contractors weekly safety alignment meetings are held with the HSE reps of all contractors.

Alongside safety, Centamin also prioritises employee health and well-being, and in 2018 a proud new clinic was established on site. The clinic provides GP level health care for staff and offers health screening tests. An initiative was rolled out in 2018 to screen employees for Hepatitis. The clinic is also able to deal with minor emergency situations and accidents.

Hazard awareness

Hazard awareness and reporting is another important way Centamin tackles safety on site. A hazard is a serious potential incident – where no personal injury or property damage occurred, that with different timing or circumstance or if unattended to would likely cause injury or damage. Centamin regard hazard reports as an early warning system to help prevent

injuries and accidents from occurring.

All employees and contractors are required to report all hazards, near misses and incidents for investigation by the HSE department. All hazard reports trigger an investigation by the HSE team and appropriate corrective and remedial measures are implemented to prevent recurrence. Where events are deemed to occur due to employee disregard for safety standards or negligence, remedial action may include additional training or disciplinary action such as suspension or dismissal depending on the severity of the incident.

Prioritising people continued

2.3 Ensuring a safe working environment continued

Performance

As illustrated in Figure VI, in 2018 the Group LTIFR decreased by 73% against 2017, to a historic low of 0.07 per 200,000 hours worked across all sites and 0.07 per 200,000 at Sukari Gold mine. This comes despite an increase in the total number of hours worked. The total number of hazards reported increased by more than 104% and more than 34,861 Take5 reports were submitted. Take5 are micro-risk assessments that all staff are encouraged to use before undertaking any task.

Figure VI: The Take5 process



Figure VII: Safety performance at Sukari Mine

	2018	2017	2016
Total hours worked	5 784 130	5,464,321	5,187,635
LTIs	2	7	7
LTIFR	0.07 (per 200,000 hours worked)	0.26 (per 200,000 hours worked)	0.27 (per 200,000 hours worked)
MTIs	16	11	12
MTIFR	0.55 (per 200,000 hours worked)	0.40 (per 200,000 hours worked)	0.49 (per 200,000 hours worked)
AIFR	3.84 (per 200,000 hours worked)	4.98 (per 200,000 hours worked)	5.86 (per 200,000 hours worked)
Hazard reports	632	310	266
Fatalities	0	0	0

Taking safety performance in our stride

As part of ensuring both a top-down and bottom-up approach to safety the management team at Sukari, and members of the safety department have introduced a weekly safety site walk.

The walk takes the management team around the entire mine to check safe working procedures are being followed, that house keeping is up-to-date, and looking for any potential hazards.

A different department and section of the mine is chosen each week – and all Heads of Departments (HODs) walk with General Manager and the Safety Manager to inspect the department. Should any issues be identified, a corrective action plan is developed and the HOD has one month to remedy it before re-inspection and follow up. The result of the weekly inspections is that all departments have worked to improve their standards, as well as improve and develop their hazard identification.

Emergency preparedness

The Sukari Mine has an onsite emergency response team in place and an onsite fire engine and ambulance. Across the mine at least one member of each department is trained in fire fighting, first aid and emergency rescue to provide first response cover and assistance until the emergency response team arrives.

There are specially trained underground rescue teams in place for the underground mine, and the underground operations include a number of refuge chambers where workers can seek shelter in the unlikely event of rock fall or cave in.

2.4 Developing strong and stable industrial relations

Centamin encourages freedom of association throughout all operations and exploration sites. The Company believes that transparent communications are a fundamental part of industrial relations, and does not place any restrictions or prescriptions on union representation.

There have been no days or time lost to strike, industrial action or employee unrest since 2011. The stable industrial relations environment is attributable to the culture of mutual respect Centamin has fostered with its workforce and includes a competitive remuneration and bonus package.

As part of the human resources policies and procedure review undertaken in 2018, Centamin is investigating means to invigorate labour participation at its operations. Centamin's objective is to ensure there are robust mechanisms in place to help employees voice any concerns and help the company to maintain strong and stable industrial relations going forward. These efforts will be led by Centamin's HSES committee and via the existing labour committees on site at Sukari Mine.

2.5 Gender and diversity

Centamin's Code of Conduct prohibits discrimination of any form, both on site and in hiring practices, and the Company is committed to being an equal opportunity employer. In 2017, Centamin employed a total of 24 women, which represents 1.6% of the total employees. As shown in the table below, 3 are at executive level or senior management level. At board level, in 2018 one of Centamin's five board members, Alison Baker, is a woman. All women have wage equality with men in similar roles.

One of the most significant hurdles to improving gender equality for Centamin is the laws and customs of Egypt – where the Sukari Mine is located, and currently no women are employed at Sukari mine.

For Egyptian laws prohibit women from:

- Working from 7pm to 7am, except in special cases.
- Operating or monitoring engines and moving equipment working underground in mines and quarries
- Working with explosives
- Fixing or cleaning operating equipment
- Welding

This makes recruitment of women to positions on site more challenging. Further to this it is not customary for women to work in remote areas away from their children and families for long periods of (as is often required for site based roles). However Centamin is currently reviewing the various roles on site and at Alexandria office, to identify those roles, which could be filled by women under Egyptian law, and aim to increase the % of women in the workforce over time. For further information regarding Centamin's efforts to improve women's employment rates, please see the Nomination committee report in this year's annual report and accounts.

In order to ensure local women draw benefit from Sukari, Centamin plans to ensure a portion of community development spend goes to projects that targets education and economic empowerment for local girls and women.

Figure VIII: Centamin's gender diversity at management level

Board	
Women	1 (12.5%)
Men	7 (87.5%)
Total	8
Executives and direct reports	
Women	3 (27.25%)
Men	8 (72.75%)
Total	11
Employees	
Women	24 (1.6%)
Men	1,473 (98.4%)
Total	1,497

Chapter three:

Building mutually beneficial relationships with local communities

Our vision: For our mines to catalyse a step-change in local economic development within host communities, to lay the foundations for thriving future prosperity and to ensure maximum transparency between communities and our mines.

Over \$744,000 invested in local communities across Egypt, Burkina Faso and Côte d'Ivoire during 2018

Over \$126.5m of goods and services procured from Egyptian suppliers in 2018, more than double that of 2017

3.1 Contributing to community development

Ensuring the support of the communities closest to operations and activities is vital to the success and sustainability of Centamin's business. The communities closest to sites provide Centamin with a pool of talented and willing workers, competent and cost-effective suppliers and help to deliver a safe and secure environment for operations.

Centamin's approach to community relations is to build and maintain open and on-going relationships with the local community, and to use operations as a lever to catalyse sustainable development in the community. This approach is implemented in three key ways:

- Recruitment of local people.
- Utilisation of local suppliers to multiply the economic impact of activities and diversify the economy in readiness for mine closure.
- Investing in community and regional infrastructure, development and projects.

Community investment

The investments Centamin makes in community development are agreed in consultation with representatives from local and national government and community members. Suggestions for projects originate in three ways:

- **Community members** can formally request an item, or support or a contribution for a project or an event;
- **Local or national government** representatives may suggest national or regional projects and priorities, where additional funding or support may be beneficial; and
- **Mine management teams** can occasionally suggest a project. In these instances it is usually to expand or extend a request from the community or government.

At Sukari Mine, all community investment and development decisions are first submitted to and discussed with the public relations and security manager – who is well known in the community, and runs ad-hoc informal community drop-in sessions in Marsa Alam most evenings. These sessions allow community members to have an informal discussion and make suggestions as to community projects, without having to travel the 25 km to site to meet with him.

Approved projects must fall within the scope of Centamin’s strategic community investment pillars (See infographic below). All projects are then approved by the Group sustainability manager and signed off at operational management level, or at board level for larger investments. A formal Community Development Framework is currently being established. As part of this Centamin has worked to identify community needs and development gaps and a long-term sustainable project will be developed.

Centamin’s approach to community project funding

Infrastructure 	Income generating 	Education 	Healthcare 	Social welfare and community 
<ul style="list-style-type: none"> • Supplying electricity to a nearby Bedouin community, constructing a children’s playground in Marsa Alam, funding the maintenance of buildings for schools in Marsa Alam. • Grading nearby roads in Côte d’Ivoire. • Assisting in waste disposal for the village of Danoa in Côte d’Ivoire. • Providing two boreholes for local communities in Côte d’Ivoire. 	<ul style="list-style-type: none"> • Donating food waste from site to four local Bedouin groups in Egypt as feed for their animals to improve grazing quality. • Establishing of a multifunctional platform for the Batie Women’s Association in Burkina Faso. 	<ul style="list-style-type: none"> • Providing bursaries and training opportunities at Sukari for geology and engineering students. • Providing equipment to Marsa Alam Nursing School. • Constructing multiple classrooms, football fields and sanitation facilities with access to potable water for schools near the Batie West and Doropo exploration site in Burkina Faso and Côte d’Ivoire respectively. • Providing bicycles to the top 50 school students in the Batie region of Burkina Faso. 	<ul style="list-style-type: none"> • Donation of a CT Scanner to Marsa Alam public hospital. • Providing anti-venoms, beds, haematology equipment, hygiene equipment, solar lamps and potable water to Batie medical centre in Burkina Faso. • Covering the medical costs of local Bedouin at Marsa Alam hospital. 	<ul style="list-style-type: none"> • Providing daily Iftars (evening meal breaking the fast during Ramadan) during Ramadan for underprivileged people in Marsa Alam. • Sponsoring local celebrations and events, such as Orphan’s day, Police day and Environment day in Marsa Alam. • Purchasing furniture and equipment for local authorities.

Building mutually beneficial relationships with local communities continued

3.1 Contributing to community development continued

Our performance

As shown in figure IX Centamin spent more than \$2.8 million on community projects since 2015.

£2.8m
spent on community projects since 2015

The bulk of this has been spent on projects near to Sukari Mine – Centamin’s only operational site, particularly at Marsa Alam, a town 25km from Sukari Mine and the site’s nearest community. In total, just over \$2 million has been spent on community projects in Egypt, with \$374,000 spent in 2018, this includes building a computer room and providing computers for Marsa Alam school and providing critical fire fighting equipment to the Marsa Alam Fire department. During 2018 Centamin also entered into an agreement with the University of Alexandria in Egypt to establish a scholarship programme for outstanding postgraduate geology students to support continued innovation in the industry particularly within Egypt. Centamin also made contributions to community projects for the communities near Centamin’s exploration projects in Burkina Faso and Côte d’Ivoire, building classrooms for nearby schools, and donated medical supplies and anti-venoms to local medical centres, and in Côte d’Ivoire have entered into a partnership agreement with German Development Bank GIZ to foster agricultural and economic development (see case study below).

Figure IX: Community spend 2015 – 2018

Community spend	Total (\$'000)	2018 (\$'000)	2017 (\$'000)	2016 (\$'000)	2015 (\$'000)
Egypt	\$2,093	\$374	\$333	\$68	\$1,318
Burkina Faso	\$233	\$43	\$60	\$59	\$70
Côte d’Ivoire	\$477	\$327	\$104	\$45	\$1
Total	\$2,803	\$744	\$497	\$172	\$1,389



Partnering for prosperity in rural Côte d’Ivoire

In 2017, Centamin signed a partnership agreement with German Development Bank GIZ to galvanise sustainable agricultural and economic development for communities near Centamin’s exploration activities in Cote d’Ivoire.

The partnership runs over three years to date, and provides the communities of Bouna, Doropo and Tehini, with training and support.

GIZ facilitates the provision of training on sustainable agriculture for community members. Centamin has contributed \$320,000 of assistance to the project thus far including:

- Seeds and fertilisers to local communities to help transform farming methods from traditional subsistence methods to larger scale projects.
- Drilling of bore holes to provide water for irrigation of farms.
- Facilitating the establishment of the CARE microfinance provider in local communities.
- Providing 14 farm irrigation systems.



Recreational facilities at Sukari.

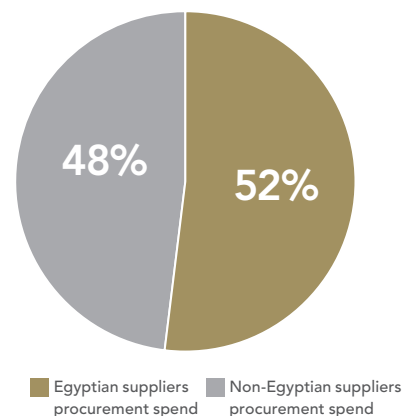
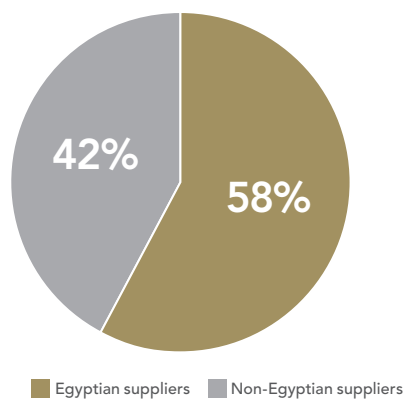
3.2 Building additional economic benefit through the supply chain

Centamin’s approach to suppliers is informed by two priorities. Firstly the need to ensure the steady supply of high quality products and materials needed for operations to run effectively, and secondly to use Centamin’s significant purchasing power as a lever to develop local businesses and standards.

As far as practicably possible Centamin is committed to sourcing goods and services from local companies and contractors – when they have the requisite, skills and experience. Doing so not only helps to create economic centres near operations, it can also deliver valuable time and cost savings to the company. All suppliers are expected to respect Centamin’s sustainability-related policies, and follow a set of minimum standards for responsible business conduct. All supply contracts contain anti-bribery and corruption provisions, and due diligence checks are undertaken prior to any contract being signed. This practice helps to raise governance standards throughout the supply chain.

During 2018, Centamin worked with an external consultant to review its approach to supply chain management with particular focus on ensuring the company is taking the appropriate steps to minimise the risk of Modern Slavery occurring in the supply chain. (See case study: Tackling the risk of Modern Slavery).

In 2018, 408 or 58% of all suppliers at Sukari Mine were Egyptian, and \$126.5 million (or more than 52%) of Sukari Gold Mine’s total procurement spend was to Egypt-based suppliers. Over the past three years Centamin has paid almost \$250 million to Egyptian suppliers.



Building mutually beneficial relationships with local communities continued

MODERN SLAVERY

IS THE FASTEST GROWING CRIMINAL INDUSTRY IN THE WORLD BUT YOU CAN'T SEE THE CHAINS



If you:



Are forced to work when you don't want to



Have to pay someone money to give you work



Are forced to live in accommodation against your will



Have your identity documents or bank account controlled by someone else



Are under 17 and work more than six hours a day, or more than four hours without a break



Or your family is threatened or intimidated

you may be a victim of Modern Slavery

Centamin is committed to stamping out Modern Slavery in our supply chain and our communities, but we need your help.



If you or someone you know might be victim of Modern Slavery, please report your concerns to us by:

- Talking to a trusted manager
- Emailing info@centamin.com
- Using Centamin's internal grievance procedures

Tackling the risks of Modern Slavery

Unlike traditional slavery, Modern Slavery is hidden. You can't see the chains.

Modern Slavery means one person or group has taken away another person's freedom, this can happen through threats of violence, deception, and debt or even forced marriage. The International Labor Organization ("ILO") estimates that worldwide more than 40 million people are modern slaves.

Due to the complex and opaque nature of modern supply chains, most companies are at risk of exposure to modern slavery, particularly if the supply chain is not assessed. Under the Modern Slavery Act (2016) large UK companies are now required to report the steps they are taking to tackle Modern Slavery. As Centamin does not generate the bulk of its revenues in the UK, it is outside the scope of the Act and not legally required to report, however, as this is an important issue to the company, in 2018 Centamin engaged external consultants to review its approach to supply chain procedures and help it take steps to minimise the risk of modern slavery occurring in its supply chain.

During 2019, Centamin plans to take the following steps to help tackle modern slavery both within its supply chain, and in the wider community.

- **Awareness raising** – Posters will be displayed through out site and employee camps, at the mine gates, and in selected spots in Marsa Alam.
- **Training & education** – Throughout 2019 Centamin's board, senior staff and members of the procurement team will receive training on the signs of Modern slavery and steps to tackle it.
- **Enhanced risk identification and supplier due diligence** - During 2019 Centamin plans to introduce the following steps to improves its risk identification processes.
 - Development of a Modern slavery risk matrix that uses sector and regional information to assess a supplier's risk.
 - Introducing questions on ESG issue management and the nature of suppliers supply chain to due diligence questionnaires.
- **Improved Disclosure** – In 2019 Centamin will provide a Modern Slavery Statement providing further detail as to how the company is addressing the risk of Modern Slavery occurring within its own operations and supply chain.

3.3 Closure planning

Because of the massive social and environmental impacts that occur as a result of mining operations, closure planning is an important issue for the entire mining industry. Centamin's approach to closure planning is informed by the legislative requirements of its host countries and the applicable IFC guidelines.

The aim at closure is to rehabilitate and restore all sites and their surrounds to a stable condition, ensure all health and safety requirements are met, and that there are no outstanding liabilities.

The Sukari Gold Mine in Egypt is Centamin's only operational site. The Sukari Gold Mine has large reserve base and long operating life – which means it is far from closure. However to ensure Centamin can meet all closure liabilities, a proportion of every annual budget is ring-fenced for closure activities. Centamin also makes provision of the on-going and continual rehabilitation and restoration of land throughout the mine's life.

Chapter four:

Responsible environmental stewardship

Our vision: To be responsible stewards of the natural environments in which our mines operate and to minimise climate risk

33% decrease in environmental incidents

Feasibility study to complete a 40MW(AC) Solar farm at Sukari in Egypt with a view to seeking board approval in 2019 for a phased installation starting with a 15MW(AC) plant

The process of extracting gold from the ground inevitably results in significant environmental impacts. Reducing the impact of environmental issues are important to Centamin's business and important to stakeholders, for example 'water efficiency' and 'cyanide management' ranked as two of the highest priority environmental issues in the 2018 materiality assessment. From a business point of view, environmental liabilities constitute a major corporate risk factor, while increases in energy efficiency and water and waste recycling can lead to valuable day-to-day cost savings. Thus it is in Centamin's business interests to ensure these impacts are appropriately minimised and managed, and to act as a responsible environmental stewards.

Policies and procedures

Centamin's approach to environmental management is formally set out in the HSE policy. Each operational site has a tailored environmental management system that is in line with national regulations and IFC standards, and takes into account the country and unique environmental specific to that site. The technical details for each environmental management system (EMS) are based on the detailed Environmental and Social Impact Assessments (ESIAs) carried out during the feasibility stage of any project.

At Sukari Mine the environmental management system is regularly monitored to ensure compliance with national environmental laws and to assess performance against international industry best practice. All aspects of onsite environmental management, including chemicals and hazardous substances, energy and emissions, water use, biodiversity and waste management are included in monitoring and reported to the board on a quarterly basis.

4.1 Environmental incidents

One of the most important ways Centamin monitors environmental performance is by tracking the number, frequency and severity of any environmental incident on site or linked to Centamin activities. As shown in Figure X environmental risks and incidents are rated on a one to five scale of consequence.

Any environmental incident that occurs is reported to the relevant authorities and remedial steps taken to repair damage and minimise the chance of recurrence. If an incident involves hazardous chemicals or materials, clean up involves specialist equipment and specially trained staff. Centamin's target is to reduce the number of level 1 - 3 environmental incidents year-on-year, and to have zero level 4 or 5 incidents.



Performance

As illustrated in figure X, there were a total of 18 environmental incidents at Sukari Mine in 2018, a 33% decrease on 2017. The bulk of Centamin's environmental incidents tend to be limited to localised spills of hydrocarbons or process water.

There have been no level 5 environmental incidents in Centamin's corporate history, and the last level 4 incident occurred more than three years ago. It should be noted that low-level incidents can often act as an early warning mechanism which, when properly analysed and resolved, can prevent more serious incidents from occurring in the future.

Figure X: Environmental incidents at Sukari

	2018	2017	2016
Level 5 – Catastrophic	—	—	—
Level 4 – Major	—	—	—
Level 3 – Moderate	—	4	4
Level 2 – Minor	7	14	11
Level 1 – Negligible	11	9	8
Total	18	27	23

- **Level 5 – Catastrophic** – Incidents that result in death, impacts beyond the site boundary with huge detrimental effect and damage, and financial loss of more than \$10 million.
- **Level 4 – Major** – Incidents that lead to permanent disability, impacts beyond site boundary causing significant detrimental effect and damage, and financial loss between \$1 – 10 million.
- **Level 3 – Moderate** – Incident causes detrimental effect and damage within the site boundary, causes lost time or restricted work, and financial impact between \$100,000 and \$1 million.
- **Level 2 – Minor** – Incident is on-site and immediately contained and has financial impact between \$10,000 and \$100,000.
- **Level 1 – Negligible** – Small localised incident or spill, financial impact of less than \$10,000.

Responsible environmental stewardship continued

4.2 Energy efficiency and emissions management

Centamin’s approach to energy use is based on three strategic pillars. The first is to ensure a secure and ample supply of electricity in order to ensure every part of the business is able to run effectively. The second is to ensure operations use energy as efficiently as possible. Ensuring efficient use of energy helps to deliver valuable cost savings.

The energy needs of the Sukari Gold Mine are met by a 68MW onsite diesel fired power station. This is because the mine’s remote location is away from the Egyptian national grid, and the electricity required to operate Sukari exceeds the capacity of the power station in the nearest town of Marsa Alam and it is not possible to connect to this plant. Similarly the remote locations of Centamin’s exploration projects in Côte d’Ivoire and Burkina Faso, as well as the respective countries’ unreliable national grids, mean that diesel generators meet the energy needs of these projects. Should these projects move forward it is possible that electricity could be provided at least in part by the national grid.

As shown in figure XI, in 2018 Sukari Gold Mine consumed 403,788 MWh of electricity, this represents a slight increase on 2017 electricity consumption. Centamin’s energy efficiency per tonne of ore milled improved slightly by 4%; this is due to increased use of the newer and more efficient MAK generators. Alongside this increase in power consumption, as shown below, fuel consumption at Sukari Gold Mine increased in 2018 to 150.97 million litres.

Figure XI: Electricity use (MWh)

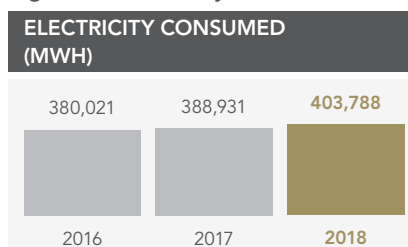
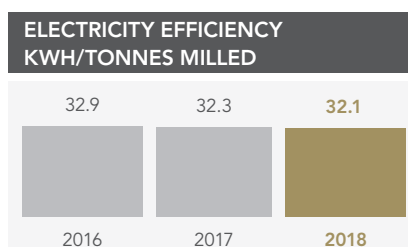


Figure XII: energy efficiency per tonne of ore milled



Managing climate risk

With the adoption of the Paris Agreement in 2016, Centamin is committed to assessing and reducing its exposure to climate risk in line with a pathway that keeps global warming below two degrees Celsius. Centamin’s strategy to reduce climate risk is to both improve energy efficiency and to install and utilise clean energy – such as solar power as far as practicably possible. Both these elements deliver significant cost savings to the business.

Centamin also aims to be fully transparent on its progress to reduce emissions by reporting environmental data to international bodies such as CDP (formerly the Carbon Disclosure Project) and in this report.

Because Centamin’s operations rely on diesel generators, the bulk of the company’s greenhouse gas emissions emanate from the onsite power station at Sukari.

Centamin has finalised a formal tender process and engaged a solar developer to design and install a solar farm at Sukari, Egypt. A feasibility study is underway to complete a 40MW(AC) Solar farm with a view to seeking Board approval in 2019 for a phased installation starting with a 15MW(AC) plant. The solar farm will reduce both overall greenhouse gas (GHG) emissions and diesel costs. (See case study ‘Catching a few more rays – expanding solar ambitions’).

Performance

As shown in figure XIV, the direct operational emissions (scope 1 and 2) for 2017, were 413,536.92 CO₂-e, and the emissions intensity per tonne of ore milled was 34.4. This represents a 4.5% increase in emissions on 2016. Centamin attributes this increase to increased production, and will work to improve emissions intensity. During 2019 Centamin will also work to establish new emissions and emission intensity targets.

Figure XIII: Fuel consumption (million litres)

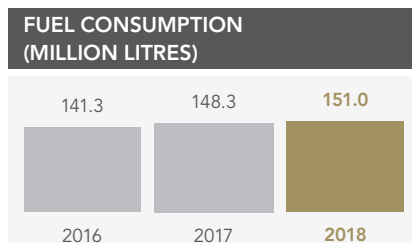
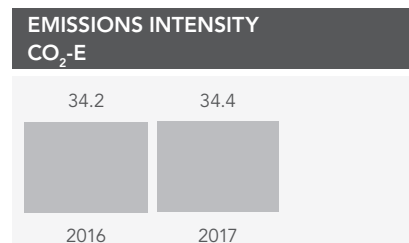
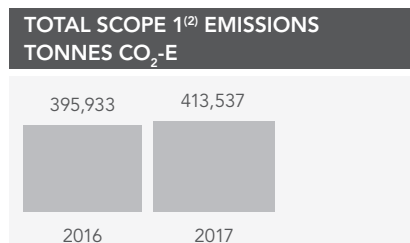


Figure XIV: emissions⁽¹⁾



(1) Total emissions for the reporting year are typically finalised during the completion of the CDP climate questionnaire. Going forward Centamin plans to align calculation and verification of emissions data with the reporting period.

(2) Centamin generates 100% of the electricity it uses. Therefore the Company does not report scope 2 emissions.



Catching a few more rays, Centamin’s expanding solar ambitions

In late 2018 Centamin has finalised a formal tender process and engaged a solar developer to design and install a solar farm at Sukari, Egypt which is intended to supplement and ultimately reduce the draw from the onsite diesel power station.

However, as plans for the solar farm developed it became apparent that the original solar plans were insufficient and in order to see an impactful cost saving and drop in emissions produced, the project would need to be scaled up.

A site and a range of potential suppliers for the solar farm have now been identified within permit boundaries. Further to this the process to obtain government permits and a shade study to determine the most effective angle, positioning and height for the solar cells is underway.

Centamin anticipate that installing 40MW(AC) of solar capacity on site will mean use of the older and less efficient MAK generators can be reduced which could meet a significant proportion of Sukari Mine’s power needs during sunlight hours. The solar farm will likely be completed in phases starting with a 15MW(AC) plant.

It is estimated with the savings in diesel costs, the solar project will have a three-year payback period.

Responsible environmental stewardship continued

4.3 Managing water use

Water is a shared, vital and increasingly scarce resource worldwide. It is also a critical input for mining activities, with many activities such as milling and ore processing requiring a secure, stable and significant supply water to operate effectively. If a mine does not manage its activities and water use properly it can lead to negative impacts on the quality and quantity of other water available to other users.

Centamin's water management strategy is to use water efficiently as possible and to only draw as much as needed and allowed within permit limits, and to reduce the impact on other water users in host countries and communities. A central pillar of Centamin's approach to water use is to maximise the amount of process water recycled, and in 2018 a group wide target water recycling rate of 50% was introduced.

A site-specific water management plan is developed for all operational sites as part of the site EMS. The management plan takes into account the different water sources available, the needs of other users, the specific evapotranspiration rates of the site, as well as other related climate issues and the quality and quantity of water available, and permit allowances. Because exploration activities tend to have limited water needs, Sukari Gold Mine is currently the only Centamin asset with a water management plan in place.

Protecting the Red Sea

Access to ground water at Sukari Gold Mine is limited, and the industrial water needs of the mine would surpass the capacity of municipal supplies and thereby negatively impact access to water for the local community. Therefore the bulk of water for Sukari Gold Mine is drawn from the Red Sea, which is 25 km away and is pumped to site via a pipeline.

Centamin recognises the significant biodiversity and importance of the Red Sea, with its magnificent coral reefs and range of fish. When planning the pipeline, great care was taken to ensure the pipeline was positioned in an area without coral reef and the pipeline is fitted with a series of micro-grills to ensure no fish or other life enter the pipes. (Also see case study 'Pipeline positioning helps protect Red Sea biodiversity in last year's Sustainability Report'.)

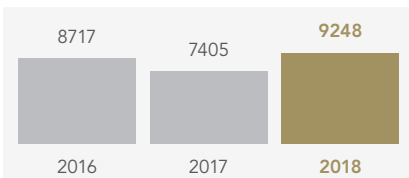
There is a reverse osmosis desalination plant on site, and to minimise the need for energy intensive desalination and thereby costs, the process plant was built to use saltwater. Desalinated water is used during the final processing stages and for the employee camp and administration block. To maximise water recycling at Sukari Gold Mine a number of closed loop cycles are used throughout the process plant, as well as in the onsite sewage treatment plant and tailings are thickened prior to disposal at the TSF.

Performance

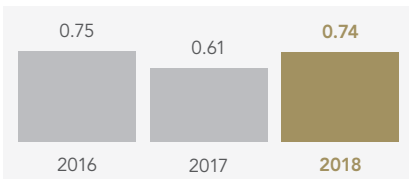
During 2018, the Sukari Gold Mine extracted a total of 9,247.5ML water from the Red Sea. This is 25% or 1,842.9ML more than 2017, Disappointingly overall water use efficiency and water recycling rate decreased during 2018 from 53.16% in 2017 to 38.9% in 2017. During 2019 efforts to improve water use efficiency and recycling rates will be redoubled. This includes the implementation an active site water balance. This will allow for return water percentages and water use to be actively and more accurately evaluated and monitored and will drive improved water performance. It will also enable the site team to actively adjust and manage water use and flow on site and ultimately reduce water abstraction and reduce costs associated with pumping and the cost of water.

The Sukari Gold Mine does not discharge any water back into the environment. Any water that remains after processing is stored at the tailings storage facility (TSF) and pumped back to the process plant for reuse as required, or is lost through evaporation. Recycling water also makes business sense; it takes a significant amount of energy to pump water the 25km from the Red Sea and to run the desalination plant.

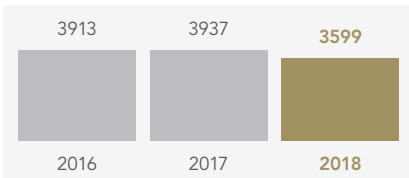
TOTAL WATER OFFTAKE (ML)



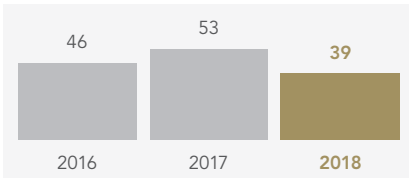
WATER USE EFFICIENCY (KL/TONNE MILLED)



TOTAL WATER RECYCLED (ML)



WATER RECYCLED (%)



4.4 Managing biodiversity

Careful management and maintenance of the range of flora and fauna at operations and exploration sites is an important part of Centamin’s commitment to environmental stewardship. Centamin’s approach to biodiversity is to take due care to minimise any potential negative effects that mining or exploration activities may have on the local environment, and to rehabilitate and restore sites and any damage caused far as practicably possible.

The overall aim is to return all sites their original state or better when operations cease and the mine officially close.

Detailed records of the full range of biodiversity present on an operational site are kept as part of the ESIA process, and a proportion of every annual budget is ring fenced for closure restoration to ensure all future liabilities can be met.

The Sukari Mine is not located in a protected area and does not impact the habitats of any International Union for the Conservation of Nature (“IUCN”) Red list species.

Because the Sukari Gold Mine is located in Egypt’s Eastern desert, where there is minimal flora and fauna, the mine has limited need for the restoration habitat. However, during 2018 as part of site rehabilitation plans a tree nursery was established, for the propagation of a range of native and endemic plant species to enable concurrent site rehabilitation, and landscaping around on-site administrative and camp areas. Another biodiversity initiative introduced at Sukari during 2018 is the installation of sonic alarms near the tailings dam. The purpose of which is to prevent passing and migrating birds from drinking water stored at the tailings dam.

Wildlife such as snakes and scorpions are found onsite at Sukari, when this happens members of the site Environmental management team capture and relocate them to safe areas on site away from people and operations. All members of the Sukari Environment team have received training to ensure animals are carefully and safely handled.

4.5 Waste management

Gold mines generate a large amount of waste, the majority in the form of waste rock. Waste materials also include chemical reagents packaging, and food waste. Centamin has detailed waste management plans in place to ensure all the hazardous and non-hazardous waste generated is minimised and dealt with in a safe and responsible manner.

Performance

At the Sukari Gold Mine, the largest waste product by volume is waste rock. Waste rock is placed in carefully managed waste dumps across site. All waste dumps are designed by geotechnical engineers to ensure maximum stability in line with IFC Performance Standards.

Other non-hazardous wastes produced at the Sukari Gold Mine are primarily waste oils and lubricants, equipment parts, domestic and food waste. The approach to this waste is to reduce, reuse and recycle as much as practicably possible. For example all food waste from the Sukari and camp kitchens is collected by HEPCA, a local conservation NGO, and distributed to local Bedouin for use as animal feed. This has helped increase flock and herd size and production yields. Other wastes are separated and stored at an onsite salvage area until they are transferred offsite to be reused, recycled, repurposed or disposed of.

Responsible environmental stewardship continued

4.5 Waste management continued

Figure XVI: Waste produced

Tonnes	2018	2017	2016
Tailings	12,567,791	12,031,915	11,554,077
Waste Rock	54,745,451	54,780,595	49,944,828
General waste	424.4	417.1	360.2
Waste to recycling	3940.4	2952.6	110.8
Waste to landfill	375,085	363,242	304,345

4.6 Responsible management of hazardous waste

The gold mining process involves the use of hazardous chemicals and reagents such as cyanide. The remnants of such chemicals remain in the tailings after processing. Thus tailings form the bulk of Centamin's hazardous waste. Tailings are the waste materials left after the economically recoverable metals and minerals have been extracted from ore.

Tailings Management

Centamin has one active TSF, the Sukari South TSF and no closed tailings facilities. The Sukari South TSF is lined so there is no seepage and contamination of soil and groundwater. It is regularly reviewed according to regulatory and internal requirements, and water samples taken from adjacent wells and boreholes to monitor for seepage. Centamin's Geotechnical department conducts internal and external technical reviews of the tailings storage facility on a regular basis. It is also inspected on a regular basis by independent consultants. The last inspection was held in November 2018.

Centamin has no history of tailings failures, but as a matter of policy the Sukari Mine has an emergency action plan for potential failures that is reviewed at a regular interval. It is important to note that the nearest external community, Marsa Alam, is located approximately 35 kilometres away from the TSF and not in the catchment area in the event of a dam failure.

During 2018, Centamin also commenced engineering work for an additional Sukari North TSF. This will be an active downstream dam with targeted completion in 2024.

Cyanide management

Poor handling and management of cyanide could have dangerous or even fatal consequences for workers and could cause long term damage to the environment. Centamin's use of cyanide is governed both by the principles of the International Cyanide Management Code (ICMC), and the requirements of Egyptian regulations. Specialised training and supervision in cyanide handling for employees and contractors who handle, transport or dispose of cyanide, and all suppliers are required to be certified to international standard.

The Sukari gold mine has an emergency response team on site, who are trained and equipped to manage emergency situations, including potential incidents related to tailings management or hazardous chemical spills.



Road dust suppression activities take place on site.

4.7 Managing air quality

Ensuring air quality is an important issue facing most mining companies. Thermal generators and large fleets of vehicles generate nitrogen oxides (NO_x/ NO₂) and sulphur oxides (SO_x / SO₂), while a range of mining activities including heavy vehicle, crushers and grinders, blasting, waste rock dumps and the heap leach are sources of dust. High levels of airborne dust can cause problems for workers and local communities and their livestock, including breathing issues and eye irritations. If not carefully managed, dust and other airborne particulate matter can increase the risk of on site accidents, hamper working conditions, contribute to occupational health issues and where communities are near by have the potential to damage social license to operate.

Centamin follows IFC guidelines to monitor and manage air quality at operational sites. Currently Centamin only monitors dust levels and gas emissions at the Sukari Mine, where air quality monitoring is conducted via a network of onsite dust monitoring stations. Because Sukari is located 25 kilometres away from the nearest permanent there is no need to monitor dust and airborne particulate matter levels outside the site boundary.

Monitoring stations are checked weekly to assess airborne particulate counts. In accordance with IFC guidelines, Centamin aims to ensure airborne particulate levels are less than 500mg/m²/day. Data from monitoring stations is reported to the relevant authorities, and also helps to guide on site dust suppression activities.

To help suppress dust, water sprayers have been fitted to crushers, and on site and haul roads are sprayed with water using either raw salt water or treated effluent. Going forward and as exploration activities step up, the plan is to begin to monitor dust at exploration activities, and in any nearby communities. Centamin also monitors stack emissions and strive to keep these below IFC guidelines for small thermal power plants.

Appendix:

GRI Content Index 2018

GRI Standard	Disclosure	Page number(s) and/or URL(s)
General Disclosures		
GRI 102: General Disclosures 2016	Organizational profile	
	102-1 Name of the organization	Centamin plc
	102-2 Activities, brands, products, and services	Gold mining
	102-3 Location of headquarters	Jersey, Channel Islands
	102-4 Location of operations	Egypt, with exploration activities in Burkina Faso and Côte d'Ivoire
	102-5 Ownership and legal form	Centamin is incorporated and domiciled in Jersey and is listed on both the London and Toronto exchanges.
	102-6 Markets served	See scope and boundary of this report, p.3
	102-7 Scale of the organization	For the total number of people see 'Workforce' table p.17 Total operations – see scope and boundary of this report, p.3. For net revenues and total market capitalisation, see p.70 and p.2 of the annual report respectively.
	102-8 Information on employees and other workers	p.17
	102-9 Supply chain	p.25
	102-10 Significant changes to the organization and its supply chain	No significant changes during 2018
	102-11 Precautionary Principle or approach	We address the precautionary principles by conducting full environmental and social impact assessments (ESIAs) before any project commences, through our risk assessments on site, which include sustainability risk, and through our Board-level strategic planning.
	102-12 External initiatives	p.10-11
	102-13 Membership of associations	Centamin is not a member of any industry or advocacy groups
	Strategy	
	102-14 Statement from senior decision-maker	p.1
Ethics and integrity		
102-16 Values, principles, standards, and norms of behaviour	p.10-11	
Governance		
102-18 Governance structure	p.8-9	

GRI Standard	Disclosure	Page number(s) and/or URL(s)
	Stakeholder engagement	
GRI 102: General Disclosures 2016	102-40 List of stakeholder groups	p.14-15
	102-41 Collective bargaining agreements	p.21
	102-42 Identifying and selecting stakeholders	p.12-13
	102-43 Approach to stakeholder engagement	p.12-15
	102-44 Key topics and concerns raised	p.13-15
	Reporting practice	
	102-45 Entities covered	p.189
	102-46 Defining report content and topic Boundaries	p.3
	102-47 List of material topics	p.12-13
	102-48 Restatements of information	No material restatements.
	102-49 Changes in reporting	No material changes to reporting during 2018.
	102-50 Reporting period	1 January – 31 December 2018
	102-51 Date of most recent report	25 February 2018
	102-52 Reporting cycle	Annual
	102-53 Contact point for questions regarding the report	Doaa Abou Elailah, Group Sustainability and Business Development Manager Centamin – doaa@centamin.com
	102-54 Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core option.
102-55 GRI content index	Produced as an appendix to the annual report and included in the standalone sustainability report	
102-56 External assurance	This report has not been externally assured. External assurance is being considered for future reports.	
Material Topics		
GRI 200 Economic Standard Series		
	Anti-corruption	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.10
	103-2 The management approach and its components	p.10
	103-3 Evaluation of the management approach	p.10
GRI 205: Anti corruption 2016	"205-2 Communication and training about anti-corruption policies and procedures"	p.10,25 – Centamin's anti-bribery policies are taught to all staff as part of induction training, and all employees receive regular refresher training. Anti-bribery and corruption provisions are also included in all supply agreements.

Appendix:

GRI Content Index 2018 continued

GRI Standard	Disclosure	Page number(s) and/or URL(s)
	Procurement Practices	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.25
	103-2 The management approach and its components	p.25
	103-3 Evaluation of the management approach	p.25
GRI 204: Procurement Practices 2016	204-1 Portion of spending on local suppliers	p.25
GRI 300 Environmental Standards Series		
	Water	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.32-33
	103-2 The management approach and its components	p.32-33
	103-3 Evaluation of the management approach	p.32-33
GRI 303: Water and effluents 2018	303-5 Water consumption	p.33
	Energy	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.30-31
	103-2 The management approach and its components	p.30-31
	103-3 Evaluation of the management approach	p.30-31
GRI 302: Energy 2016	302-3 Energy intensity	p.30-31
	Emissions	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.30-31
	103-2 The management approach and its components	p.30-31
	103-3 Evaluation of the management approach	p.30-31
GRI 305: Emissions 2016	305-4 GHG emissions intensity	p.31
	305-1 Direct Scope 1 emissions	p.31
	Effluents and Waste	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.33-34
	103-2 The management approach and its components	p.33-34
	103-3 Evaluation of the management approach	p.33-34
GRI 306: Effluents and Waste 2016	306-2 Waste by type and disposal method	p.33-34

GRI Standard	Disclosure	Page number(s) and/or URL(s)
	Environmental Compliance	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.28-29
	103-2 The management approach and its components	p.28-29
	103-3 Evaluation of the management approach	p.28-29
GRI 307: Environmental Compliance 2016	307-1 Non-compliance with environmental laws and regulations	p.29
GRI 400 Social Standards Series		
	Occupational Health and Safety	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.18-21
	103-2 The management approach and its components	p.18-21
	103-3 Evaluation of the management approach	p.18-21
GRI 403: Occupational Health and Safety 2016	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	p.20
	Training and Education	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.17
	103-2 The management approach and its components	p.17
	103-3 Evaluation of the management approach	p.17
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	p.17
	Human Rights Assessments	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	p.10, 26-27
	103-2 The management approach and its components	p.10,14, 26-27
	103-3 Evaluation of the management approach	p.10,14, 26-27
GRI 412: Human Rights 2016	412-1 Operations that have been subject to human rights reviews or impact assessments	p.10, 14, 26-27 – Centamin is currently reviewing its approach to human rights as part of its ongoing work on Modern Slavery and this includes human rights reviews and impact assessments



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