



# 2019 CORPORATE RESPONSIBILITY REPORT

**GOLDEN STAR**

## COMPANY PROFILE

Golden Star is an established gold mining company that owns and operates the Wassa and Prestea underground mines in Ghana, West Africa. Listed on the NYSE American, the Toronto Stock Exchange and the Ghanaian Stock Exchange, Golden Star is focused on delivering strong margins and free cash flow from its operations.

Our Vision is to become *a sustainable diversified gold mining company that our stakeholders are proud to be associated with*. As a company, and as individuals, we value caring, fairness, respect, honesty and collaboration in all relationships. Golden Star is committed to upholding the highest standards of safety, employee well-being and protection of the environment, and strives to be a responsible corporate citizen.

## ABOUT THIS REPORT

This Corporate Responsibility Report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards 'Core' option, the United Nations Global Compact (UNGC) reporting requirements, and the Sustainability Accounting Standards Board (SASB) Metals and Mining Sustainability Accounting Standards. This is the 14th annual sustainability/corporate responsibility report published by Golden Star.

The report scope, boundaries, and performance data cover the company's operating entities in Ghana and, unless otherwise indicated, this report does not consider the company's exploration, development, and closed properties.

Except where indicated otherwise (including with respect to certain initiatives advanced by the company in early 2020 described herein), all information and performance data in the report are current as at December 31, 2019, and unless noted otherwise, all currency amounts are stated in U.S. dollars.

The GRI, Mining LPRM and SASB indexes are included as appendices in this report. Additional performance data tables are available at [www.gsr.com/responsibility](http://www.gsr.com/responsibility).

Please direct any feedback on the report to [info@gsr.com](mailto:info@gsr.com).



NYSE AMERICAN: **GSS** TSX: **GSC**

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## MESSAGE FROM THE Chief Executive Officer

The year 2020 marks the beginning of a Decade of Action for achieving the SDGs and we recognize the critical role we – and the mining industry and private sector as a whole – can and must play in delivering this action.

On behalf of the Golden Star teams in London and in Ghana, I am pleased to welcome you to the Golden Star 2019 Corporate Responsibility Report. The report provides disclosures for key environmental, social, and governance (ESG) topics relevant to our business and our stakeholders and details our ESG performance in 2019. It also highlights many of our teams' achievements over the past year, which I am incredibly proud of.

The report also represents our annual Communication on Progress (CoP) for the United Nations Global Compact. We have been longstanding supporters of the initiative with this report representing our 14th CoP.

We remain steadfast in our commitment to supporting the Compact, especially with its dedicated focus on supporting the advancement of the Sustainable Development Goals (SDGs). The SDGs provide the main framework for achieving global societal goals, including solving our biggest collective challenges, from poverty alleviation and gender equality to climate change and water scarcity. The year 2020 marks the beginning of a Decade of Action for achieving the SDGs and we recognize the critical role we – and the mining industry and private sector as a whole – can and must play in delivering this action.

In 2019, we were recognized for our important contributions to the SDGs by the United Nations Global Compact Network Canada. Several of our award-winning initiatives – including our poverty alleviation, sustainable livelihoods, mine closure, and community health projects – were featured in their SDG Emerging Practice Guide. We were also a finalist for their SDG Leadership Award. Throughout this report, we highlight our ongoing contributions and commitments to the SDGs and their associated targets.

In 2019, we enhanced our commitment to sustainability and corporate responsibility through a renewed focus on ESG management, including by creating the position of Executive Vice President, Head of Sustainability on our Executive Committee. This was done not only in recognition of an increasing focus on ESG from investors and shareholders globally but as a reflection of our own mission to realize value as leaders in ESG. We are supportive of these initiatives and will continue to integrate ESG into our annual corporate responsibility reporting as well as our ongoing mainstream disclosures. Doing so will further enhance our commitment to transparency and accountability to all of our stakeholders.

Operationally, 2019 was another successful year for Golden Star. Wassa delivered a strong year of production and we signed landmark memoranda of understanding with local communities. At Prestea, we continued the advancement of our optimization project to enable the continued improvement of our underground operations. Company-wide, we continued the implementation of our Health and Safety Strategy in alignment with our core business strategy and values. Notably, we achieved strong improvements in incident reporting and realized the lowest malaria incidence rate in the company's history. We were also selected 'Best Performer, Occupational Health and Safety' at the Ghana Mining Industry Awards.

In closing, I would like to express my strong gratitude to the Golden Star team for all of their individual and collective efforts over the past year. In what has been a year of real transformation for Golden Star, our teams, existing and new, have pulled together to face any challenge and continue to improve. Now more than ever before, we can see the fruits of our labour. As we as a human population face one of the greatest challenges of our times, namely the global spread of COVID-19, the leadership position we have taken in local procurement, partnerships, and strengthening of the national health system is now realizing additional value to our own business sustainability.

As we advance through 2020, the health and safety of our workforce and host communities will remain paramount, and we will continue to work in close partnership with our local stakeholders to help mitigate associated local impacts. I look forward to the continued dedication from our teams throughout 2020 as we continue to deliver enduring, sustainable value for our stakeholders.



**Andrew Wray**  
President and Chief Executive Officer

## HIGHLIGHTS IN 2019



**ZERO** reportable environmental incidents

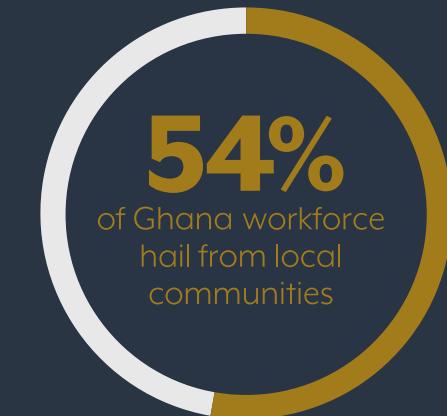
**ZERO** fatalities

**1.79 TRIFR<sup>1</sup>**  
(Total Recordable Injury Frequency Rate)

**8.75 AIFR<sup>1</sup>**  
(All Injury Frequency Rate)



  
Best Performer in  
Occupational Health and  
Safety at the Ghana  
Mining Industry Awards



  
**\$79+**  
million  
in total salaries paid

  
**\$152**  
million  
(Ghana plus Ghana local  
procurement)

  
**\$15**  
million  
in local procurement



(lowest malaria incidence rate in company  
history, ahead of 0.6 target rate)



**54%**  
of contractors from  
host communities



# 6 OUR COMMITMENT



## MESSAGE FROM THE EVP, Head of Sustainability

Corporate Responsibility has long been hard-wired into the DNA of our company. It is an integral part of our purpose and vision – making it a key driver of success.

**Corporate responsibility has long been hard-wired into Golden Star's DNA. It is an integral part of our purpose (what we do) and our vision (where we are going) – making it a key driver of success. Our Board of Directors, executive management, and operations teams place a strong focus on corporate responsibility and will continue to do so going forward.**

Golden Star also recognizes the renewed focus our stakeholders – including our current and potential investors – are placing on environmental, social, and governance (ESG) management. Globally, stakeholders are increasingly expecting the private sector to demonstrate how they are managing and disclosing their performance on ESG topics, from health and safety and gender diversity to energy and water management.

Golden Star fully supports these initiatives for enhanced ESG disclosures, including through recognized, global reporting frameworks, such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB), as increased transparency aligns with our values. Consistent with our commitments, our 2019 Corporate Responsibility Report aligns our management and disclosure approach to the GRI, Local Procurement Reporting Mechanism and SASB reporting frameworks and associated disclosures, and such frameworks will provide a roadmap for ongoing continuous improvement.

At Golden Star, we are very proud of our demonstrated track record of success in delivering on our ESG performance, from winning the 2018 Prospectors and Developers Environmental and Social Responsibility Award, to being recognized by international NGOs for our sustainable development projects, as well as being recognized for the fourth year in succession at the Ghana Mining Industry Awards for leading practice in corporate social responsibility.

However, our success is not defined solely by recognition. What matters most is how we deliver. Managing our impacts to people and the environment requires commitment, planning and management right through the organization; never have I been more conscious of this than in the current COVID-19 pandemic. The single-minded way in which our teams have focused on the health and safety of people, throughout our preparedness efforts, is awe inspiring. Through personal difficulty, stress and uncertainty, the team has had a single objective – protecting the health and safety of our workers and host communities. Our own team members, when faced with the option to join their own families elsewhere in Ghana, have elected to stay at our operations and assist in our efforts to educate our local teams and communities.

I am truly proud to be a member of the incredibly dedicated and inspired Golden Star team. The positive impact we continue to have on our stakeholders – and the broader societal purpose we serve – inspires me daily. I look forward to working with our team to continue to generate long-term, sustainable value for our investors, our host governments and communities, and global society as a whole.

**Ms. Philipa Varris**

Executive Vice President, Head of Sustainability

### Responsible Gold Mining Principles

Golden Star's Vision is to become a sustainable diversified gold mining company that our stakeholders are proud to be associated with. Our commitment to upholding the highest standards of safety, employee well-being and protection of the environment – and to be a responsible corporate citizen – align with the Responsible Gold Mining Principles (the "Principles") developed by the World Gold Council. As such, in 2020 we endorsed and have embarked on a journey to conform with the Principles. In this process of adopting the Principles we have:

- Made a public statement of commitment to the Principles

- Commissioned a gap analysis against the Principles to guide our action plan development
- Secured independent assurance over the process of conformance to the Principles to ensure stakeholder confidence and credibility in the process and conclusions

Also, in the publishing of this Report, we have:

- Demonstrated our commitment to full disclosure of information to help external stakeholders understand how conformance with standards adopted by the company is achieved
- Disclosed instances or events which have given rise to a situation of non-conformance and the steps that will be taken to remedy the situation.



## UN GLOBAL COMPACT PROGRESS AND GOALS

## SUSTAINABLE DEVELOPMENT GOALS

The United Nations Global Compact (Compact) is the world's largest corporate responsibility initiative, with over 10,000 private sector signatories worldwide. It consists of ten principles in the areas of labour, human rights, environment, and anti-corruption.

Golden Star became a signatory to the Compact in 2006 and has integrated the principles into its core corporate responsibility strategy. This has translated into an increased focus on the integration of the Sustainable Development Goals (SDGs) into our strategy, including the setting of goals and targets aligned with the SDG indicators.

The tables below summarize the progress achieved in 2019 and our commitments for 2020.

### UN Global Compact 2019 Progress

2019 Goal	Progress	
HUMAN RIGHTS	Develop a corporate Policy on Diversity.	Achieved. We released our Inclusion and Diversity Policy to mark International Women's Day in March 2020. See page 15 of this report for a detailed summary of this achievement.
	Commence design of programs in support of the Policy on Diversity.	Achieved. We announced a variety of initiatives to support the implementation of the policy. See page 15 of this report for further information.
	Zero human rights complaints against the company.	Achieved. A review of our grievance registers confirms the achievement of this target.
	Continue to advance our programs on local procurement.	Commenced public reporting and disclosures aligned with the Local Procurement Reporting Mechanism (see page 32 of this report for more details).
LABOUR	Zero fatalities and sustained reduction in recordable injuries.	Zero fatalities. Recordable injury rates saw an expected increase after implementation of program to encourage reporting of incidents.
	Sustain malaria case rates under 6% of clinic attendance and under 0.6 cases per capita.	Achieved. Malaria case rates in 2019 represented 3.3% of clinic attendance. We recorded 0.24 cases per capita and achieved the lowest malaria incidence rate in the history of the company.
	All leadership complete Safety Leaders Empowerment and Development training.	Achieved. All of our senior leadership team participated in the training as part of our three-year Health and Safety Strategy.
	Continue to strengthen safety culture through implementation of our Safety Plan.	Completed second year of three-year plan.
ENVIRONMENT	Zero reportable environmental incidents.	Achieved. There were no incidents or spills that were reportable to the Ghanaian Environmental Protection Agency.
	100% regulatory compliance for air, water, noise, dust.	Achieved. 100% regulatory compliance met for all stated categories.
ANTI-CORRUPTION	Continue to report payments under the EITI.	Achieved. Details of these payments can be found in the data tables available alongside this report on our website.
	Undertake conflict of interest survey with all senior leadership.	Conflict of Interest survey and modalities were developed. Training on the system was incorporated into leaders' annual anti-corruption training ahead of roll out in 2020.

### 2020 UN Global Compact Goals

Compact Area	2020 Goal	
HUMAN RIGHTS	Roll out of the Inclusion and Diversity Policy across the organization.	5 GENDER EQUALITY
	Communicate the Golden Star Way and our values (caring, honesty, respect, fairness and collaboration) to the workforce	8 DECENT WORK AND ECONOMIC GROWTH
	Zero legitimate human rights complaints against the company.	10 REDUCED INEQUALITIES
	Continue to advance our programs on local procurement.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS
EMPLOYEES (LABOUR)	Zero fatalities and sustained reduction in recordable injuries.	3 GOOD HEALTH AND WELL-BEING
	Sustain malaria case rates under 6% of clinic attendance and under 0.35 cases per capita.	5 GENDER EQUALITY
	Continued implementation of Golden Star Health and Safety Strategy.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS
	Advance towards 20% female representation within the workforce.	17 PARTNERSHIPS FOR THE GOALS
ENVIRONMENT	100% compliance with dust, noise and vibration, and water requirements.	6 CLEAN WATER AND SANITATION
	Zero reportable environmental incidents.	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
	Zero significant spills.	13 CLIMATE ACTION
	Disclose tailings information to Investor Mining and Tailings Safety Initiative.	15 LIFE ON LAND
ANTI-CORRUPTION	Bogoso operations to obtain ICMC certification.	10 REDUCED INEQUALITIES
	Develop an energy management framework for the business, including provisions for energy audits and energy targets.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS
	Undertake conflict of interest survey with all senior leadership.	17 PARTNERSHIPS FOR THE GOALS
	Anti-corruption training to the level of superintendent.	

### LEADERSHIP ON THE SDGs

At Golden Star, we are strong supporters of the SDGs and see them as central to our approach to corporate responsibility.

In 2019, several of our initiatives were recognized by the United Nations Global Compact Network Canada for our leadership on advancing progress on the SDGs. We were recognized alongside several large, multinational companies for their efforts and success.

Our Golden Star Oil Palm Plantation (GSOPP) was recognized for its important contributions to SDG 1: No Poverty. GSOPP is an innovative social enterprise initiative that we established in 2006 as a non-profit subsidiary of Golden Star. It adopts the smallholder concept to support the development of oil palm plantations amongst our host communities and provides alternative livelihoods to over 700 farmers and part-time workers as well as their families.

Our wide-ranging health initiatives were featured for their contribution to SDG 3: Good Health and Wellbeing. A key focus of these initiatives is partnerships, including with our medical services provider, local health authorities, Ghanaian and international NGOs, and international development agencies.

Lastly, our approach to local value retention was recognized for its contribution to SDG 8: Decent Work and Economic Growth. This includes our approach to local employment, local procurement, and providing alternative livelihoods beyond mining, including for artisanal, small-scale miners.



# 10 OUR COMPANY



## MESSAGE FROM THE Chair, Corporate Responsibility Committee

Our Vision, Our Mission, and Our Values define who we are – and how we will grow – as a company. Underpinning each of these is our commitment to corporate responsibility.

At Golden Star, we recognize that managing our environmental, social and governance (ESG) impacts – both positive and negative – requires effective commitment and leadership from the highest levels of our company through to our on-the-ground teams. We also recognize that robust corporate governance mechanisms are essential to establishing a strong foundation for generating long-term, sustainable value for our stakeholders.

As Chair of the Corporate Responsibility Committee at the Golden Star Board, I am proud of the company's commitment and dedication to corporate responsibility and ESG management and performance.

As longstanding members of the World Gold Council, we are also committed to supporting and implementing the Responsible Gold Mining Principles (RGMPs). The RGMPs provide a comprehensive framework for the gold mining sector to address key ESG issues and set out clear expectations for consumers, investors, and the downstream gold supply chain as to what constitutes responsible gold mining. Beginning in 2020, we will implement to RGMPs across our business and expect to be fully compliant by the end of 2022.

Our corporate governance practices and performance are rated strongly by Institutional Shareholder Services (ISS), one of the world's leading corporate governance ranking agencies. We currently have an overall corporate governance rating of 2 on a scale of 1 to 10, with one representing lower governance risk and 10 representing higher governance risk. This represents a superior overall score among mining companies and within our peer group.

I am especially proud of Golden Star's commitment to embed inclusion and diversity across all levels of the company, including among our Board of Directors and executive management team as well as across our wider workforce. Currently, women hold 33% of our Board of Directors and executive management positions – percentages that are nearly twice the 2018 averages of TSX-listed companies.<sup>2</sup>

In 2020, we furthered our commitment to inclusion and diversity with the adoption of our *Inclusion and Diversity Policy*, which we released to mark International Women's Day and the 25th anniversary of the Beijing Declaration and Platform for Action. As part of the Policy, we set an ambitious target of 20% female representation across our workforce by 2025, a nearly 13% increase from current levels. This will be a challenging, yet exciting endeavour and one that will require commitment and dedication across all levels of the company. I look forward to exciting new partnerships with our stakeholders – including local and international women's groups – to help achieve our goals.

As we progress in 2020, I look forward to continued collaboration with the Golden Star Board of Directors and the Executive Committee to drive continual improvements in our corporate governance practices and performance. Doing so will lead to enhanced business performance and – most importantly – will help us realize our vision of being a sustainable, diversified gold mining business that our stakeholders are proud to be associated with.



**Anu Dhir**  
Chair, Corporate Responsibility Committee

## MATERIALITY ASSESSMENT

In line with the Global Reporting Initiative (GRI) Standards, we conduct materiality assessments for the development of our corporate responsibility reports. Doing so helps define the key environmental, social, and governance (ESG) disclosure topics that are most important to our business and our stakeholders, from our investors and shareholders through to our host governments and communities. The assessment results also help inform our ongoing corporate responsibility strategy and planning.

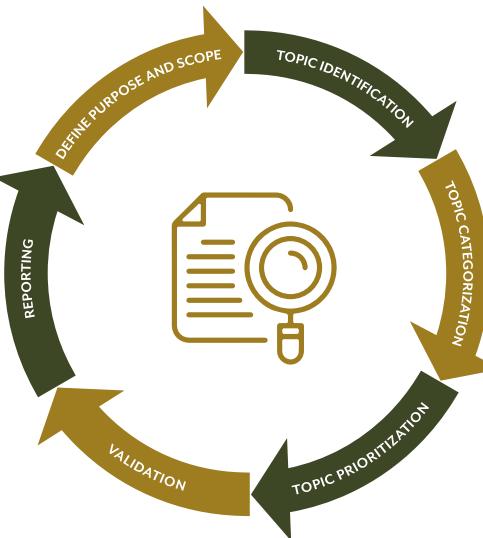
In 2019, we conducted a materiality assessment covering our business. Our materiality process is illustrated in the graphic to the right.

For the purposes of this report, we reviewed our 2019 assessment results and additional topics for disclosure. To do so, we considered the Sustainability Accounting Standards Board (SASB) Materiality Map to further define ESG topics that are financially material to our business. We also reviewed and integrated topics from our annual enterprise risk management (ERM) review process, including our enterprise risk universe developed with our executive and operations leadership as well as

external experts. Lastly, we considered investor feedback through a review of investor ranking agencies disclosure requirements and reviewed our grievance management systems to incorporate greater external feedback into the results.

Based on this review, we included the topics from our 2018 report and two new topics, namely 'Energy and Greenhouse Gas Emissions' and 'Waste Management'. The matrix below provides an overview of these topics and the table on the following page provides a summary of each topic.

Additional topics are reported throughout this report in line with the GRI



- 1** Health and safety
- 2** Water
- 3** Community relations
- 4** Local employment
- 5** Economic performance
- 6** Employees and people development
- 7** Artisanal / small-scale mining
- 8** Energy and GHG emissions
- 9** Waste management
- 10** Community economic development
- 11** Tailings management
- 12** Human rights
- 13** Anti-corruption and bribery
- 14** Mine closure
- 15** Permitting and compliance
- 16** Local procurement
- 17** Diversity and inclusion
- 18** Governance
- 19** Community health

## Material topics overview

Topic Area	Topic	Importance of Topic
ENVIRONMENTAL	Permitting and compliance	Our operations are subject to extensive environmental laws, regulations, and permits that we must comply with.
	Water management	Water is a key input in our processing facilities. Effective water management is critical, as water is an important shared resource.
	Tailings management	There are a wide range of potential risks associated with tailings facilities that must be effectively managed so as to prevent adverse impacts on the environment and local communities.
	Mine closure	Mine rehabilitation and mine closure are important parts of the mine life cycle. Providing viable, productive post-mining land uses is critical for our local communities to ensure we leave a positive, enduring legacy.
	Energy and emissions management	Energy inputs are significant costs for mining operations. The emissions from the mining sector as a whole contribute to climate change, which is a key global challenge.
SOCIAL	Waste management	Responsible resource development requires managing waste – both hazardous and non-hazardous – to prevent adverse impacts and promote environmental stewardship and beneficial reuse.
	Health and safety	The health, safety and wellbeing of our people is paramount and as such is a core part of our business strategy. Our workers and contractors expect a safe and healthy working environment.
	Employees and people development	We rely on recruiting, developing, and retaining talent. Our people are our greatest asset and the foundation of our business success.
	Inclusion and Diversity	Inclusion ensures people feel valued and have a sense of belonging. Diversity provides different perspectives for more comprehensive decision-making and better business outcomes.
	Community relations	Maintaining inter-dependent relationships with our host communities is essential to securing our social license to operate.
	Community development	Our operations are key catalysts for local social and economic development, including beyond direct impacts. This is essential to ensuring net benefit from our presence for our host communities.
	Local procurement	Local procurement is one of the key economic benefits of our operations. It helps to build businesses that can thrive during and after mining is complete for thriving rural economies.
GOVERNANCE	Human rights	In line with the UN Guiding Principles on Business and Human Rights, we have an ethical responsibility to respect the human rights of our stakeholders throughout the full life cycle of our operations.
	Sustainability governance	Robust corporate governance mechanisms provide for the effective management and stewardship of our company. Commitment from leaders is critical for effective sustainability management.
	Ethics and integrity	We must demonstrate to stakeholders that we conduct our business with the highest standards of ethics and integrity, so they have confidence in how we do business.
	Board and executive level diversity	Our company benefits from a diversity of viewpoints, backgrounds, skills, and experience. Women play an important role in the management and stewardship of our company.

## SUSTAINABILITY GOVERNANCE

We recognize the importance of sound corporate governance that is consistent with the best interests of our investors and that helps all of our stakeholders to be confident in the credibility of our business conduct.

Our Board of Directors (Board) is the highest corporate governance body within our organization. The Board's mandate is to oversee the management of the business and affairs of the company. It delegates the responsibility for day-to-day operations – including ESG management – to the Chief Executive Officer (CEO) and the Golden Star management team.

We have a designated Board-level Corporate Responsibility Committee. Its primary function is to assist the Board in the furtherance of Golden Star's commitments to stakeholders in maintaining a healthy and safe workplace, environmentally sound and responsible resource development, good community relations, and the protection of human rights.

In 2019, we appointed an Executive Vice President (EVP), Head of Sustainability to our Executive Committee at the senior management level. The EVP is responsible for leading ESG management across the company and they report to the CEO, who in turn reports to the Board.

At an operations level, we have 136 specialists in safety, health, environment, communities and security within our business to guide the systems and implementation of standards.

In 2020, we have already augmented our approach to sound corporate governance by refreshing our Board committee charters. The changes reflect evolving corporate needs as well as external developments related to effective ESG management.

### Conducting Our Business with Ethics and Integrity

We are committed to conducting our business activities with the highest levels of integrity and business ethics. In support of this, we have developed and implemented multiple policies related to ethical conduct. This includes a *Business Conduct and Ethics Policy*, a *Code of Ethics for Directors and Officers*, and a *Whistleblower Policy*.

Our *Business Conduct and Ethics Policy* is founded on the guiding principle that we must adhere to all applicable laws and ethical business conduct requirements wherever we do business. It also reaffirms that ethics and behavior are individual responsibilities, and that high standards of behavior are expected of all employees, regardless of position.

The Code outlines our requirements related to anti-corruption, including the Canadian Corruption of Foreign Public Officials Act (CCFPA), the United States Foreign Corrupt Practices Act (FCPA) and the UK Anti-Bribery Act.

These requirements are communicated across all levels of our company through an annual attestation process. Our 2019 attestation process was deferred to 2020 to align with our transition to our new corporate headquarters in the United Kingdom. 100% of directors, management, and specified employees required to complete the attestation did so. Conflict of interest training formed part of the anti-corruption training in the lead up to our inaugural conflict of interest survey, which was completed by all new and existing corporate officers and senior Ghanaian management in 2020.

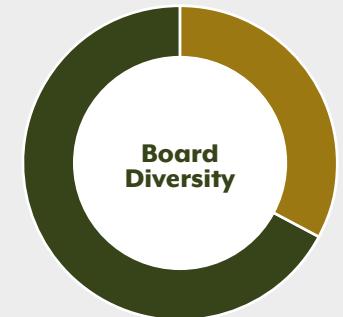
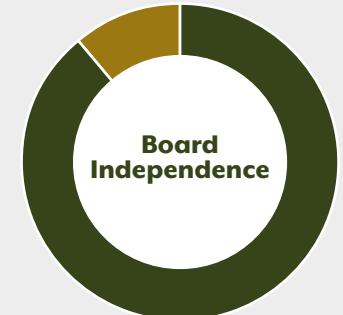
Anti-corruption risks are also considered through our annual enterprise risk management exercises; our operations were not considered to be at high-risk for corruption.

There were no incidents of corruption affecting our company in 2019 and no employee, contractor, or business partner was terminated for a corruption-related incident.



## Sustainability Policies

- Safety, Health, and Wellbeing
- Environment
- Human Rights
- Community Development and Support
- Community Relations
- Inclusion and Diversity



**33%**  
of executive  
team female

We report all of our public payments under the Canadian Extractives Sector Transparency Measures Act (ESTMA). We also support the Ghanaian chapter of the Extractives Industry Transparency Initiative (EITI) by publishing a more detailed breakdown of our public payments. Both these disclosures are available in the data tables associated with this report and on our website at [www.gsr.com/responsibility](http://www.gsr.com/responsibility).

In our 2018 Corporate Responsibility Report, we set a goal of undertaking a conflict of interest disclosure with all of our senior leadership. The purpose of the disclosure was to identify any specific risks and inform relevant management interventions. In 2019, 100% of our senior leadership undertook conflict of interest training ahead of disclosure roll-out in 2020. We will use the results to further inform our efforts in ensuring ethical business conduct in line with our values.

Our *Whistleblower Policy* provides for a confidential hotline and website to enable employees to report potential violations of our *Business Conduct and Ethics Policy*. It also provides for an investigation process and corrective action measures, where required. ‘No retaliation’ is a key component of the policy, so that employees can confidently report potential violations. We do not tolerate retaliation or discrimination of any kind towards an employee submitting a concern or cooperating in a related investigation.

In 2019, we received four complaints to the hotline. All were reported to the Audit Committee of the Board and have been concluded on. The company's external auditors also tested the system and found the control to be effective.

### Promoting Board and Executive Diversity

We believe that our company benefits from a diversity of viewpoints, backgrounds, skills, and experience. We also recognize and acknowledge the important role that women play in contributing to the Company's stewardship and management.

We have developed and implemented a Board- and executive management-level *Diversity Policy*, which recognizes the importance of having a diverse pool of directors and executive officers. Doing so enables us to retain a broad range of perspectives, skills, experience, and expertise for the effective stewardship and management of the company. The Corporate Governance and Nominating Committee of our Board of Directors actively works with recruitment organizations to increase the pool of female candidates for Board and executive management positions.

Women comprise one-third of our Board of Directors and one-third of our executive management team. These figures are above industry averages for Canadian-incorporated companies, indicating a healthy diversity at the highest levels of our company and we remain committed to further supporting diversity across our company.



Directors Hon Mona Quartey and Anu Dhir meet with members of the Golden Star team.



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



5 GENDER EQUALITY



10 REDUCED INEQUALITIES



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



**99%**  
of Ghana  
workforce  
is Ghanaian

**54%**  
of Ghana  
workforce  
from local  
communities



**700+**  
farmers and  
contract workers  
employed by  
GSOPP

GSOPP  
directly supports  
livelihoods for  
over 2,000 local  
people

## OUR PEOPLE

Our business success relies on the individual and collective efforts of a skilled, motivated, diverse and engaged workforce. We therefore place a strong emphasis on recruiting, developing and retaining talent. We undertake a variety of training initiatives to further the development of our workforce. In 2019, we provided a collective 79,000+ hours of training, representing approximately 52 hours of annual training per member of our workforce. Key focus areas included health and safety, leadership, mining and mine support training.

In 2019, we also placed a strong emphasis on safety leadership training in support of our Health and Safety Strategy and Plan. In 2019, we set and achieved a goal to have all senior operations leadership participate in the training. For more information on this initiative and our strategy, see the 'Safety, Health, and Wellbeing' section of this report.

In line with our commitment to respecting human rights, we support our employee's rights to freedom of association and collective bargaining. Some 79% of employees are covered by a union across our company and we maintain positive relations with our union partners at both of our operations. In 2019, there were no material labour incidents or events across our company.



## Providing Local Employment Opportunities and Decent Work

The local employment we generate is one of the key benefits of our operations and is of great interest to our local communities. We are therefore committed to supporting local employment opportunities as far as practicable and we have established local hiring policies with our host communities. Quotas have been established based on the degree of impact from our operations as well as population.

We also implement a variety of targeted initiatives to support community skills training, development, and employability. At both our operations, we implement youth attachments, national service and graduate traineeships on a recurring basis. We also support employment diversification through alternative livelihood projects, including our award-winning Golden Star Oil Palm Plantation (GSOPP) business, which – in 2019 – provided employment for over 700 people and livelihoods for over 2,000.



**Diversity Policy**  
approved by  
Board of Directors



**20%**  
female diversity  
target by 2025

## Advancing Diversity and Gender Equality

We recognize the important benefits a diverse workforce brings to our company. A diversity of viewpoints, experiences, and skills help us make better business decisions and improves our overall business performance.

We also recognize that women are largely under-represented across the mining sector, including within our company. In 2019, only 7% of our direct workforce was female, which is consistent with previous years for our company. We therefore recognize that there are significant opportunities for our company to invest in programs and initiatives to increase the participation of women within our workforce and beyond.

In our 2018 Corporate Responsibility Report, we committed to developing a company-wide diversity policy to extend our current *Diversity Policy* beyond our Board of Directors and executive management team. We did so in recognition of the business benefits diversity will bring to our company as well as in support of SDG 5: *Achieve gender equality and empower all women and girls*. We are pleased to have achieved this goal in 2020.



## Bold Action to Empower Women and Girls

On March 6, 2020, we released our *Inclusion and Diversity Policy* to mark International Women's Day and to recognize the 25th anniversary of the adoption of the Beijing Declaration and Platform for Action (1995) – considered the most progressive blueprint ever for advancing women's rights.

The policy was developed through engagement with employees and specialist human resources and community affairs teams. The policy has been approved by the company's Board of Directors, demonstrating the importance our company places on advancing gender equality.

Critically, we set a bold – yet we believe achievable – target of having 20% female representation across our business by the end of 2025. This will be a significant increase from the current 7% level of female representation across our company.

To support these aims, we will continue to work in partnership with a variety of organizations to achieve this target. In 2020, we will start to implement an Inclusion and Diversity plan that will include targets to enhance involvement of women in work placements, internships and graduate opportunities. This includes a partnership with Women in Mining UK to provide summer internships at Golden Star.

We will continue to work with our long-standing partners at the German International Development Agency (Gesellschaft für Internationale Zusammenarbeit (GIZ)) and the Employment and Skills Development (E4D) in Africa Program to promote the empowerment of women and youth in Ghana through skills and enterprise development. In our own Golden Star Oil Palm Plantation we are proud to report that 30% of the workforce is female, up from 16% just five years ago.

Achieving gender equality requires bold commitments and collective action from the private sector, governments, and society as a whole. For us, it will require the concerted efforts from the highest levels of our company through to our on-the-ground partnerships. Together, we can all look forward to a more just and equitable world for all.





8.75

AIFR

(All Injury Frequency Rate)

## A SAFE AND HEALTHY WORKFORCE

The health and safety of our workforce remains paramount to us and our values of caring and respect. The commitment to safe operations is fundamental to our vision and mission.

Our company-wide *Policy on Safety, Health and Wellbeing* serves as the foundation of our management approach to providing a safe and healthy working environment. Under the Policy, we commit to developing a culture where safety is a core part of our company's values and an integral part of our operations and performance management.

The Policy commits us to developing operating standards that meet or exceed all relevant laws and regulations related to health and safety. It is applicable company-wide and applies to all of our contractors as a condition of doing business with our company.

At each of our operating sites, we have developed and implemented robust health and safety management systems that are aligned with ISO 45001. The systems are implemented to meet our corporate policy as well as the Ghanaian Minerals Commission's requirements. The systems cover our entire workforce and are overseen by specialist health and safety personnel with accountability to assess system effectiveness for continual improvement.

The systems contain a variety of risk management components focused on fatality and injury prevention, as well as emergency preparedness. Company-wide risk management for health and safety is overseen by our Executive Vice President, Sustainability, with the Corporate Responsibility Committee of the Board providing oversight.

Our workforce is involved in the development of our overall safety approach through site-level safety committees and safety standards, and safe work procedure development. Management review occurs through quarterly COO safety meetings. Communications materials are posted throughout the operations to promote awareness as an additional communication vehicle.

Our systems include tools to report potential, near-miss, and actual incidents. These include formal and informal processes, including anonymous reporting that can be made via a hotline. Reporting of hazards, risks, and incidents is encouraged across the company – so much so that we have set targets for this. This approach is guided by our cultural belief '*If it's not safe, make it safe*'.

Safety competency is a key element of our strategy. In addition to general and role-specific training, we conducted targeted training initiatives in 2019 including Leaders Empowerment and Development (GS LEAD) training, Take-5 training, and safety standards workshops.

These training initiatives are key parts of our health and safety strategy and plan. The strategy defines a value and principle-based roadmap to managing safety and health risks including elements to evolve our safety culture. Other key elements of the strategy include leadership commitment and workforce involvement, risk management and critical risk controls, enhanced systems and open and transparent reporting.



**Best Performer**  
in Occupational  
Health and Safety  
at the Ghana  
Mining Industry  
Awards



1.79

Total Recordable  
Injury Frequency Rate<sup>3</sup>

Caption: Golden Star team receiving awards including 'Best Performer, Occupational Health and Safety' at the Ghana Mining Industry Awards.

We provide our employees with a wide range of preventative and curative medical and healthcare services, including national health insurance coverage for our employees and dependents. Our health plan incorporates programs targeted to promote enhanced health outcomes in key areas of need, including malaria prevention, which is one of the leading causes of premature death in Ghana. We also implement employee health and wellbeing awareness programs to promote non-work-related wellness.

In our 2018 Corporate Responsibility Report, we set multiple safety and health goals to help drive continual improvement in our performance. We achieved our goals of zero fatalities and the continued implementation of our health and safety strategy and plan. We also met our non-occupational health goal related to malaria incidence within our workforce.

For more information on our approach to malaria prevention – including some of our international recognition for our successful efforts.

Additional information on our community health initiatives can be found in the 'Community Development' section.

## INNOVATIVE PARTNERSHIPS FOR COMMUNITY HEALTH

Community health needs are high in our areas of operation and we recognize the unique role we can play in serving as a facilitator for improved health outcomes and achievement of public health goals, including SDG 3: Good Health and Wellbeing. We also recognize the importance of SDG 17: Partnerships for Development in achieving positive health outcomes for local communities.

We partner with our on-site medical services provider, local and national health agencies, Ghanaian and international NGOs, and international development organizations. Perhaps most important are our partnerships with local and national health agencies. By doing so, we help build capacity, strengthen local and national systems, and promote long-term sustainability.

Since 2009, we have partnered with the German International Development Agency, Gesellschaft für Internationale Zusammenarbeit (GIZ), on the 'Prevention is Better than Cure' project, with six other partners in the fields of health service provision, health care infrastructure, medical and diagnostic equipment and health insurance. We financed the design, construction and equipping of a teaching clinic at Akyempim that has been purpose-built for preventative health programs, including family planning and individual health status initiatives.

We have also implemented several initiatives in partnership with a US-based NGO, Project C.U.R.E., including for health services provision and to deliver the 'Helping Babies Breathe' initiative. The initiative was delivered using the train-the-trainer model to build capacity for reducing post-natal mortality, the leading cause of premature death in Ghana.

In recognition of our efforts in support of SDG 3: Good Health and Wellbeing, we were featured in the UN Global Compact SDG Emerging Practice Guide. [globalcompact.ca](http://globalcompact.ca).

In 2019, our involvement in the Private Sector Malaria Prevention Program with the John Hopkins Center for Communications Programs, led to the achievement of the best malaria prevention performance in the company's history.





**O.24**  
malaria incidence  
(lowest malaria  
incidence rate in  
company history)



"The work Golden Star is doing is genuine leading practice. What they have achieved in preventing malaria aligns perfectly with the SDGs and our own work at the Private Sector Malaria Prevention project implemented by the John Hopkins Centre for Communications Programs. We believe that by empowering staff to adopt healthy behaviors for themselves, their families and their communities we can save lives. It is for this reason that we awarded Golden Star with one of our inaugural 'Malaria Safe' awards and why they are now one of the private sector companies with low malaria case rates in Ghana."

**FELIX NYENOR-FOSU**  
CHIEF OF PARTY  
Private Sector Malaria  
Prevention,  
Johns Hopkins Centre For  
Communication Programmes



#### Best Practice in Malaria Management

Malaria is one of the most pressing public health concerns impacting our workforce and local communities. West Africa has one of the world's greatest malaria burdens and malaria is one of the leading causes of premature death in Ghana.

As a result, the disease has a direct, material impact on our business. It is one of the primary reasons for clinic attendance and results in significant lost time and lower productivity for our workforce. It is estimated that companies located in Ghana spend 0.5% of their corporate returns on malaria treatment for their workforce and their families.<sup>4</sup> We therefore invest in a dedicated, targeted malaria prevention program.

In partnership with our on-site health services provider, we have developed and implemented malaria prevention management plans. Key components of the plans include indoor residual spraying (IRS), 24-hour on site testing and access to treatment, monitoring and reporting systems, and education and training initiatives. Education and training initiatives are extended to local communities to promote broader local awareness on malaria prevention and treatment. In addition, we work with our local and international health partners – such as the Gesellschaft für Internationale Zusammenarbeit (GIZ) – to provide malaria bed nets to local communities. In 2019, under this partnership we issued 5,000 long-lasting insecticide treated bed nets to our workforce and host communities.

Since the program's inception, we have realized significant reductions in malaria cases, case rates and lost productivity. In our 2018 Corporate Responsibility Report, we set a public goal of sustaining malaria incidence rates under 6% of clinic attendance and under 0.6 cases per capita. We are pleased to have achieved this goal in 2019 with just over 3% of clinic attendance attributable to malaria and a malaria incidence rate of 0.24 per capita. This represents the lowest malaria incidence rate in the history of our company.

In recognition of our work in this area, we were featured in the United Nations Global Compact Network Canada SDG Emerging Practice Guide. We were recognized for our important contributions to SDG 3 and SDG Target 3.3, which calls for the end of the epidemic of malaria. We were also recognized as a 'Malaria Safe' company by the Johns Hopkins Center for Communications Programs.



<sup>4</sup> Johns Hopkins Center for Communication Programs.



**21**

## PROTECTING THE ENVIRONMENT



## ENVIRONMENTAL STEWARDSHIP

A commitment to environmental protection is part of our core approach to doing business. This commitment is reflected in the highest levels of our company and we recognize that environmental stewardship is both a shared and an individual responsibility.

Our *Policy on the Environment* commits us to meeting or surpassing all legal and regulatory requirements related to environmental protection. We are also committed – through our support of the UN Global Compact – to the precautionary approach to environmental management.

All of our operations have established environmental management systems which are based on the plan-do-check-act model and are aligned with the International Standards Organization (ISO) 14001 framework. They are overseen by specialist on-site managers and a variety of support staff.

Before the commencement of major projects, we conduct environmental and social impact assessments. We are also required by the Ghanaian EPA to submit updated Environmental Management Plans (EMPs) every three years to account for ongoing changes to our operations. The EMPs are key documents for identifying key impacts, developing mitigation measures, establishing roles and responsibilities, providing budgetary allocation, and developing action plans to deliver on our commitments.

We also maintain comprehensive monitoring programs for key environmental components aligned to key regulatory requirements. Our 2019 monitoring results show we achieved 100% compliance with our air and noise and vibration requirements and 100% compliance with our water management requirements. Our 2019 monitoring results show we achieved 100% compliance with each of our air, noise, vibration and water management requirements.. Our last reportable environmental incident was in 2011.

## BIODIVERSITY

We recognize that mining operations can have adverse impacts on biodiversity, especially when located near or within areas of high biodiversity value and/or protected areas. We also recognize the growing expectations that investors and other stakeholders place on biodiversity impacts and associated management.

At Golden Star, our operations are not located in or near any protected areas. The areas in which we operate are typically characterized as having low biodiversity value and, as such, we did not identify biodiversity as being a material topic of high importance. We nevertheless implement management measures and controls to manage limited biodiversity impacts at our operations.

We conduct a variety of biodiversity studies as part of environmental impact assessments for major projects. Impact identification and associated management plans are developed and integrated into our overall EMP. The studies provide a knowledge base for broader environmental impacts and ecosystem health. Action plans are then developed for the management of these limited impacts.

We maintain registers of IUCN Red List species as part of these plans and conduct ongoing monitoring to determine their status. Our most recent surveys indicate that a significant majority of present species are classified as 'Least Concern' under the IUCN classification system, with only one species classified as endangered.

As detailed in our materiality assessment, we will continue to monitor biodiversity management requirements as our company evolves.



**100%**  
compliance with  
environmental  
monitoring  
requirements



**ZERO**  
reportable  
environmental  
incidents



**100%**  
compliance with  
regulatory water  
monitoring program



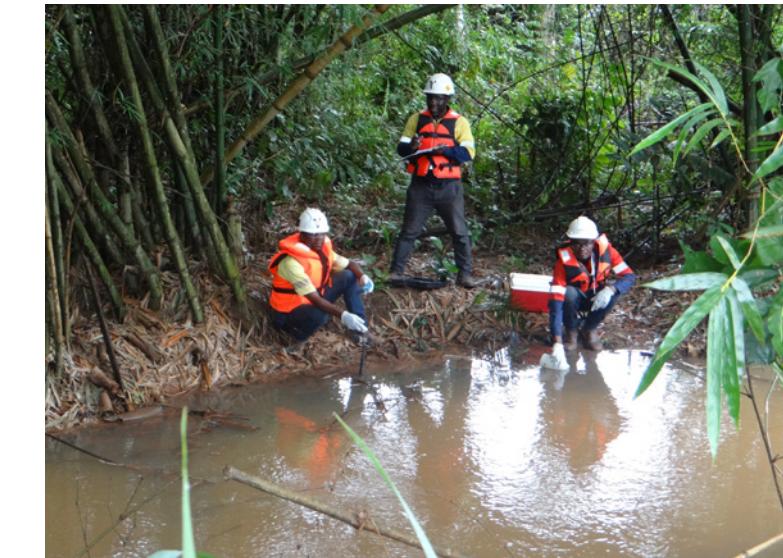
**6,871 ML**  
water withdrawal

**1,049 ML**  
water discharged

**5,822 ML**  
water consumed

**11,764 ML**  
water used

**5,943 ML**  
water recycled



## WATER STEWARDSHIP

We recognize that access to clean water is a fundamental human right. We also recognize that water is a shared resource and that we must manage our interactions with water effectively so that we do our part in preserving water resources for future generations.

We interact with water in a variety of ways. Water is a key input in our processing activities and we actively dewater our underground mines and open pits. We manage excess process water and rainfall into our tailings facilities. We also use water for dust suppression on access roads and in our open pits, as well as for domestic use at our office complexes and mine residential areas.

We assess water-related impacts as part of environmental impact assessments for major projects. Standard impact assessment methodologies include detailed hydrological and hydrogeological studies by technical experts, which are used to understand existing conditions, assess potential risks, and inform the development of management plans. Stakeholder consultation is a key component of the impact assessment process to help identify and communicate impacts as well as to solicit feedback on operational plans.

Our assessments of water-related stress use the World Resources Institute Water Risk Atlas. None of our operations are located in areas of 'high' water stress.

As required, we discharge water according to seasonal conditions, specifically the two major rainfall seasons in tropical West Africa. We treat water impacted by our activities prior to discharge as required by the Ghanaian Environmental Protection Agency guidelines.

At our Bogoso processing facilities, we have a process water treatment plant that uses reverse osmosis to treat process water prior to discharge. At our sites, water is also treated for release using settling, oil/water separation, de-nitrification and biochemical treatment marshes as applicable. Background conditions, natural mineralization, and the profile of receiving water bodies are all considered prior to discharge.

By maintaining extensive water monitoring programs in our catchment areas, we help to ensure we meet or surpass water quality requirements. In 2019, we maintained 100% compliance to water sampling and quality requirements at our operations. We will set a similar target for 2020.

We seek to avoid unnecessary mixing of clean water with our operations and to recycle as much water as possible to reduce our consumption. We have installed diversion systems to prevent clean run off from entering our mining areas. We reuse excess process water from our tailings facilities as make-up process water. For dust suppression on access roads, we re-use water dewatered from open pits and from rainfall that enters closed-out pits.



## RESPONSIBLE ENERGY AND EMISSIONS MANAGEMENT

Mining operations worldwide are energy-intensive with energy requirements representing significant inputs and costs. As an industry, our combined emissions contribute to climate change globally and we all have an individual and collective responsibility to help solve this societal challenge.

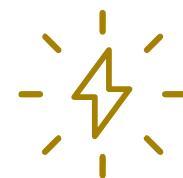
In addition, there are a range of climate-related risks that may impact our business: physical risks related to changing climate patterns as well as transition risks related to policy and regulatory changes.

We recognize the growing importance and expectations of our investors and other stakeholders in these areas. As a result, we included energy and emissions management disclosures into our annual corporate responsibility reporting after a review of our materiality assessment.

We consume electricity mostly from the Ghana National Grid and it is used primarily for processing operations. We use diesel for our heavy and mobile equipment. These inputs represent the bulk of our energy and greenhouse gas emissions generation.

Our energy consumption and the energy intensity of our operations as well as our Scope 1 and Scope 2 emissions and emissions intensity are disclosed. In 2020, we will continue to further develop and implement systems for collecting energy and emissions-related data to augment these disclosures and improve our energy efficiency and performance.

In 2020, we will be transitioning to a different energy mix at our Wassa operations. This will improve our overall energy supply security and provide the potential to flatten our load profile. In addition, we will begin conducting energy audits at our operations by 2021 to determine a more comprehensive baseline of our consumption and emissions, in addition to potentially realize cost savings. As such, we are not currently positioned to set energy reduction targets across our company although we are committed to doing so within the next two years. In 2020, we will also evaluate the potential to align with the recommendations of the Taskforce on Climate Related Disclosures (TCFD) within a three-year timeframe.



**937.4**  
(000s GJ energy consumption)

**4.6**  
energy intensity  
(GJ/oz gold produced)



**60.7**  
total GHG emissions  
(000s tonnes of CO<sub>2</sub>e)

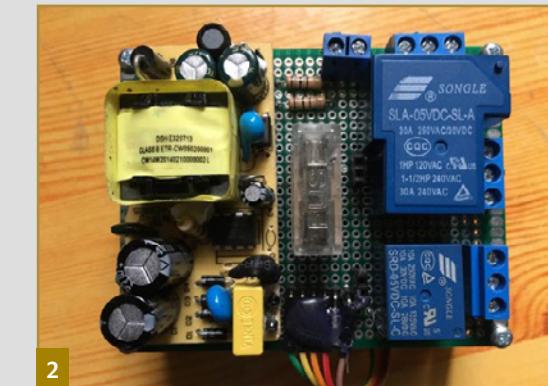
**0.30**  
GHG emissions intensity  
(tonnes of CO<sub>2</sub>e/oz  
gold produced)



### GSR energy saving project (Autolux)

The Wassa Plant Maintenance Electrical team has designed Autolux, an electronic-based power controller that uses a passive infrared sensor to detect human motion to control the automatic switching of light and an air conditioner in a room/space. This device is helping to conserve electricity which will have been lost / wasted due to electrical bulbs left on as well as protect appliances (air conditioners) from electrical surges.

Currently, Autolux has been piloted in the Electrical tools room at the Plant and it is working effectively and it's been planned to be replicated across the Mine.



2



1



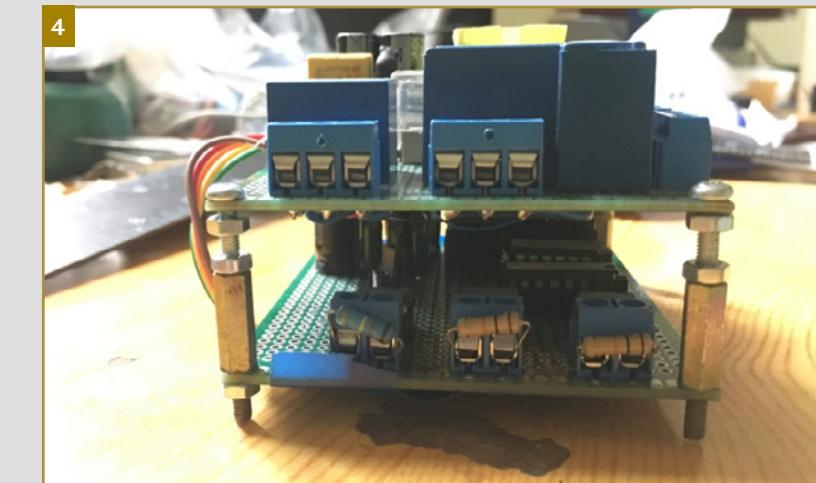
3

**1** Autolux Project Team  
• Team members (left to right):  
Sebastian Adjei, Solomon Odoom,  
Joshua Ocran, Patrick Akomanyi,  
Cheslyn Hewlett (not shown)  
• Team leader: Joshua Ocran  
• Project Sponsor: Michael Nkansah

**2** Internal make-up of Autolux

**3** Complete Autolux device

**4** Alternative view of Autolux device



## RESPONSIBLE RESOURCE USE

Our operations generate a variety of by-products and wastes that may be hazardous and non-hazardous. We are committed to managing these effectively to promote resource conservation and to prevent and minimize adverse environmental impacts.

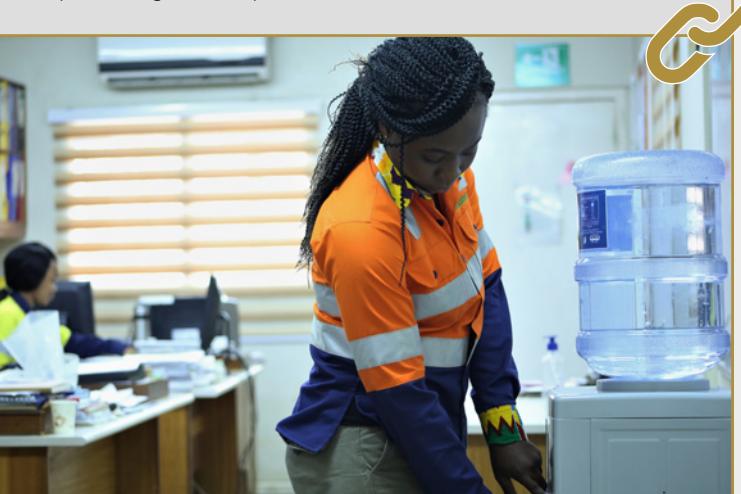
Our *Policy on the Environment* outlines our high-level commitment to resource conservation through effective waste management. All of our operations have waste management plans as part of their overall EMP. These include registers of identified impacts and management controls as well as management action plans. Key management controls include the adoption of the waste hierarchy, establishment of waste segregation streams, and routine training for employees and contractors.

Recycling and re-use provisions are also key parts of site-level waste management plans. We work with EPA-accredited vendors to help ensure the safe disposal and handling of waste. Where practicable, we provide recycled materials to local communities for their beneficial reuse.

In 2019 we commenced sensitization on our plans to reduce single use plastic usage and in 2020 we imposed a ban on the purchase of single use plastic drinking containers by our operations. In 2020/21 we plan to tackle the use of non-recyclable materials in our catering system.

In 2018 Lilian Awuah (page 10) proposed and led an initiative to eliminate the use of sachet and bottled water at the Wassa underground. Lilian collaborated with specialists in the business and built a case for establishment of ice and water dispensers and personal water ice chests for underground workers. The outcomes were the elimination of plastics in the mine, enhanced air quality and heat stress avoidance.

In 2019, Golden Star built on this great initiative with a campaign to sensitize the entire workforce on our plans to reduce single use plastic usage, the inauguration of a working group and development and implementation of plans. These efforts allowed us to impose a ban in 2020 on the purchase of single use plastic drinking containers and use of plastic bags at our operations.



**39 hectares**  
land rehabilitated in 2019



**2021**  
target for ban on  
single-use plastic



## EFFECTIVELY MANAGING TAILINGS

Tailings management is one of the most material potential environmental risks for mining companies globally. If not managed effectively, there can be a wide range of significant environmental, social, and economic impacts on stakeholders. This has been clearly evident with several recent high-profile tailings facility failures.

We operate four tailings storage facilities (TSFs) across our company. At our Bogoso processing facilities, we operate two tailings facilities, including one active facility and one managed inactive facility. At Wassa, we also operate two tailings facilities, with one active and the other undergoing revegetation trials.

We design and manage our TSFs in line with Ghanaian regulations, the International Commission on Large Dams (ICOLD), the Australian National Commission on Large Dams (ANCOLD), and the Canadian Dam Association (CDA) guidelines.

We conduct environmental impact assessments for the construction of all facilities, including major expansions. Tailings management plans are incorporated into our overall environmental management plans in order to define roles and responsibilities for management actions, budgetary provisions, and review mechanisms. On-site responsibility for tailings facilities rests with qualified on-site specialist personnel and site General Managers. Overall responsibility of the operation of our TSFs rests with the Chief Operating Officer with ultimate responsibility resting with the Chief Executive Officer. The Corporate Responsibility Committee of the Board provides Board-level oversight of tailings management.

Each of our tailings facilities is operated in accordance with a TSF Operations Manual and has established emergency response plans. Extensive monitoring provisions are included in the procedures to enable early warning mechanisms and review the stability and integrity of the facility structures. Qualified engineers of record conduct quarterly inspections and independent experts conduct quarterly third-party audits.

In 2019, our Wassa operations maintained full certification with the International Cyanide Management Code (ICMC). Our Bogoso operations will undergo a pre-audit process in 2020 with a view to obtaining re-certification after voluntarily withdrawing from the code in 2012.

We take a holistic approach to rehabilitating and closing our TSFs. Since 2016, we have integrated our award-winning Golden Star Oil Palm Plantation (GSOPP) into our tailings revegetation practices. This approach allows for progressive revegetation of our TSFs, while enabling viable, post-mining land uses that generate long-term economic value for local communities.

## SUSTAINABLE MINE CLOSURE

We aim to leave a sustainable legacy from our operations once mining is complete. This means leaving enduring, positive environmental, social, and economic impacts for our host communities.

Importantly, we take an innovative, holistic approach to mine closure to help ensure that we not only rehabilitate sites in a safe and environmentally responsible way, but also to provide for productive, viable next land uses.

We begin planning for closure at the beginning of the project development phase by considering viable post-mining land uses with landowners, local communities, and regulatory bodies. As conditions of our environmental and social impact assessment permits, all of our projects and operations have mine closure plans that are updated regularly to account for changes in our operations.

We post bonds and other security for the closure plans to ensure that its provisions are implemented over time. The Ghanaian regulatory framework provides for site relinquishment once established closure completion criteria are achieved and the site performs in accordance with monitoring criteria over a period of time.

## ARTISANAL AND SMALL-SCALE MINING

Artisanal and small-scale mining is a widespread phenomenon in the Western Region of Ghana. Locally, this type of mining is referred to as *galamsey*. Galamsey is mostly unregulated and is highly dangerous, from a human safety and rights perspective, as well as in terms of the significant negative impacts on the surrounding environment. In particular, local water bodies are severely impacted by galamsey resulting in widespread degradation of water resources for local communities.

Galamsey activities occur adjacent to all our operating sites in Ghana. The level of activity ranges from small groups conducting hand excavations and washing, to larger-scale operations employing blasting, large earth moving equipment, riverbed dredging/excavation, and/or underground operations.

In order to delineate our activities from those of others, we conduct extensive baseline studies and condition monitoring. Our water monitoring has shown that in some locales near our operations, illegal miners are employing cyanide for processing. We diligently report the activities and impacts identified by our monitoring efforts to regulatory agencies via monthly and other routine statutory reporting.

We support the Government of Ghana's efforts to regulate mining in all its forms. In 2012, following a multi-partisan engagement involving small-scale mining associations, a section of our Prestea concession was ceded to the Government, who subsequently released this land for authorized small-scale mining. We continue to critically review our concessions to ensure that areas of land that are not financially viable for us to mine are returned to the Government for potential exploration or mining by others.

In addition to these actions, our community development programs focus on livelihood programs to promote alternative employment. By doing so, we can help to provide mainstream employment opportunities that are safer and more secure, while reducing negative environmental risks and impacts on local communities.



**\$8.1 million**  
GSOPP expenditure to date

**700+**  
farmers and contract  
workers in 2019

**~20,000 GH₵**  
revenue per farmer in 2019

**1,133 ha**  
planted to date



GSOPP Plantation successfully established on former TSF.

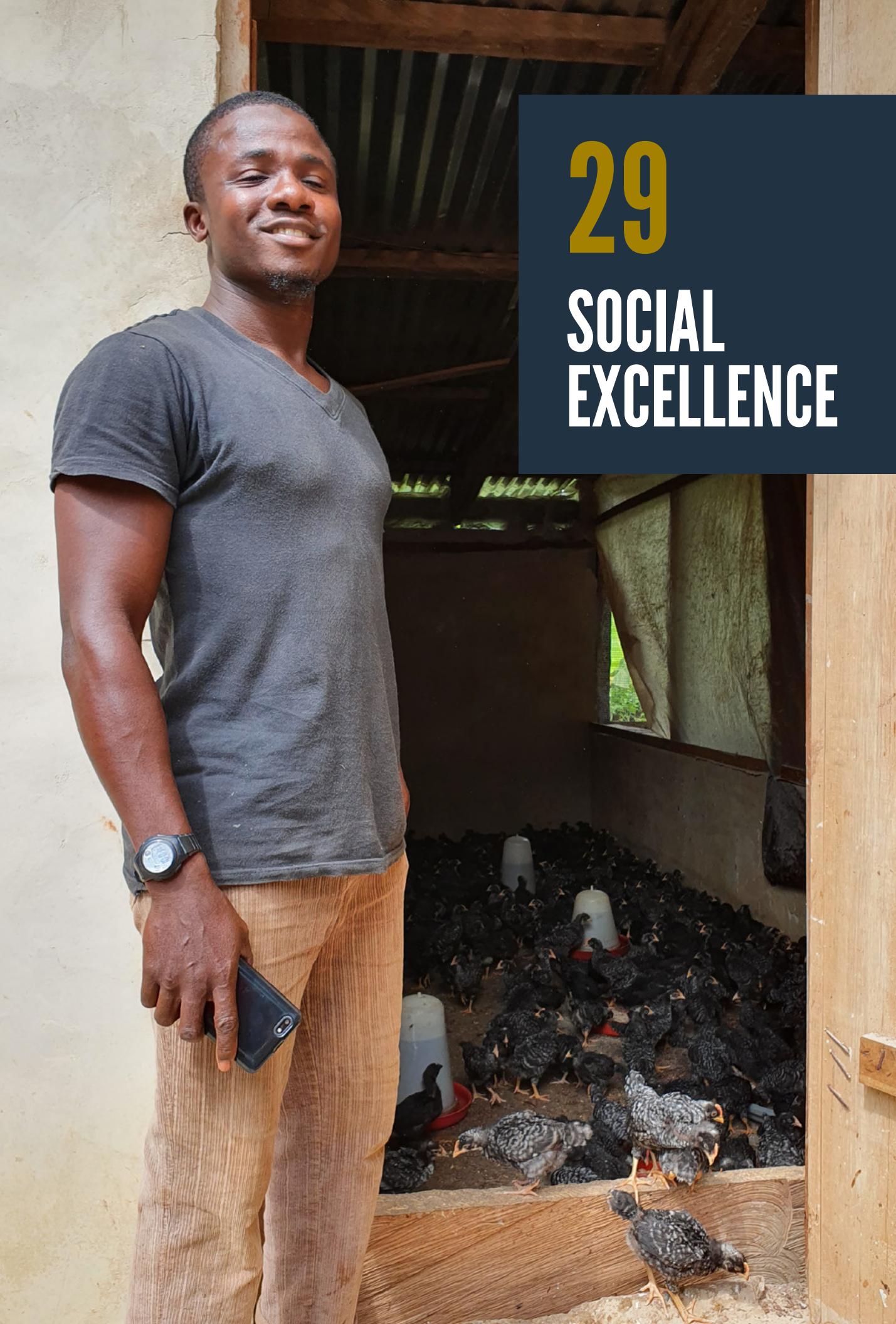
#### GOLDEN STAR OIL PALM PLANTATION

In 2019, we continued to evolve our award-winning Golden Star Oil Palm Plantation (GSOPP) initiative through revegetation trials on inactive sections of our tailings storage facilities ahead of closure. GSOPP promotes the development of oil palm plantations amongst our host communities using the smallholder concept, in partnership with Traditional Authorities and affected farmers, and with the support of the agroforestry industry and other partners.

Over the past three years, the initiative has reached several key milestones, including:

- Mainstream plantations have reached over 10 years of age – demonstrating long term commercial viability.
- Farmer associations have been established and recognised as industry leading practice
- The GSOPP beneficiary age has reduced, demonstrating the program is a viable alternative livelihood for youth
- Farmers who were formerly on the poverty line, now enjoy farm revenues well in excess of this level
- Consistent application of best farm management practices ensures yields are more than three times the small-holder average for Ghana
- Commencement of a micro credit scheme for beneficiaries that will act as savings model for future re-planting
- A third of the plantation workforce are female, and 36% youth (<45 years) – demonstrating diversity and inter-generational equity.

To date, we have contributed over \$8.1M to the GSOPP initiative. GSOPP now employs over 700 farmers and part-time contractors. In 2020, we are committed to further enhance the value arising from GSOPP through programs to enhance autonomy of the business, diversify the operational base, as well as working towards RSPO certification – the global international standard for ethical palm oil production. For more information on this initiative, see the UN Global Compact SDG Emerging Practice Guide at [globalcompact.ca](http://globalcompact.ca)



## 29 SOCIAL EXCELLENCE



## BUILDING STRONG COMMUNITY RELATIONSHIPS

Being a partner of choice for host governments and communities is central to our business strategy. This is because sound community relationships based on mutual respect and trust are essential to securing our social license to operate.

Our *Policy on Community Relations* serves as the foundation of our approach to developing and maintaining positive community relations with our stakeholders. The policy outlines our overall approach to ensuring that sound community relations are an integral part of our operations and performance management systems.

We conduct social impact assessments for major projects, which include plans for minimizing adverse impacts, while maximizing positive impacts. The assessments incorporate a risk-based approach to community and stakeholder relations. The results are included in our EMP, which cover both the physical and social environments. The plans are updated every three years and are submitted to the Ghanaian Environmental Protection Agency (EPA).

We have comprehensive stakeholder engagement plans based on stakeholder mapping exercises at each of our operations. The plans provide for a structured and streamlined approach to managing stakeholder relationships and expectations.

We have established Community Consultative Committees (CCCs) covering groups of nearby communities at our operations. The CCCs provide for a formal vehicle for ongoing, two-way communication with our local communities. They are comprised of representatives from a broad section of stakeholder groups, including Traditional Leaders, women's groups, youth groups and local government officials.

We have also established Community Mine Consultative Committees (CMCCs), which are umbrella groups covering all communities at each of Wassa and Bogoso/Prestea. They meet quarterly and are comprised of Divisional Chiefs, local Members of Parliament, company officials and members of the CCCs. Critically, the CMCCs make formal recommendations to the Golden Star Development Foundation Board on the selection of community projects to be funded by Golden Star.

We maintain robust grievance management systems to ensure the timely receipt and effective resolution of concerns related to our operations, including a grievance management procedure, standardized complaints forms, and grievance registers.

In 2019, we signed landmark memoranda of understanding with our host communities at Wassa, which are modeled on the success of similar agreements established with our GSBPL host communities in 2012.



**20**  
communities  
covered by formal  
consultation  
committees



**THREE**  
MoUs signed with  
local communities  
at Wassa



## Sustainable Community Development

We recognize the important role we can play in serving as a catalyst for community and economic development for our host communities, even beyond the direct economic benefits we generate. We aim to maximize these benefits as much as possible to provide enduring social and economic value from our operations.

We implement extensive community development programs at our operations in partnership with our local communities and specialized development organizations. Our programming is guided by our *Policy on Community Development and Support*, which outlines our philosophy and approach towards investing in local communities.

We have established Development Foundations at both of our operations. The Foundations are funded with \$1 for every ounce of gold produced plus 0.1% of pre-tax profit. We have contributed almost \$3.9 million to the Foundations since their inception.

Local CCCs identify and define projects based on local needs assessments. The projects are reviewed by broader-based CMCCs and they make formal recommendations to the Boards of the Foundations for project selection.

This inclusive process helps build capacity and promotes local ownership of projects. Importantly, all projects must have a long-term sponsor to promote community ownership and long-term sustainability.

We implement a variety of sustainable / alternative livelihoods projects within our local communities to promote economic diversification beyond mining. In addition to GSOPP, in 2019, we continued the implementation of animal rearing projects at Wassa. At Bogoso, we continued to implement new projects with our partners LOCOMs in the tailoring and building construction supply chains.

Partnerships have long been critical to our approach to community development and even more so with the adoption of the SDGs and SDG 17: Partnerships for Development. This goal was established to underpin the overall SDG framework, in recognition that achieving the SDGs and associated targets will require concerted, collaborative action. Through partnerships, we are able to leverage the skills, expertise, and resources of myriad organizations to achieve outcomes that far exceed the capability of any one organization.

We continue to partner with a wide range of development organizations from local and international NGOs, local and regional government agencies, and international development organizations. In the case study below, we highlight some of our community health initiatives with our longstanding partners.



**\$3.6M**  
contributed to  
the GSDF to date



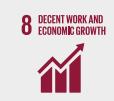
**Long-term sponsors**  
required for all projects



17 PARTNERSHIPS  
FOR THE GOALS



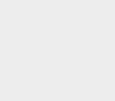
1 NO POVERTY



8 DECENT WORK AND  
ECONOMIC GROWTH



9 INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



11 SUSTAINABLE CITIES  
AND COMMUNITIES

17 PARTNERSHIPS  
FOR THE GOALS



We are thrilled Golden Star is providing information in accordance with the Mining LPRM, helping empower local suppliers to target supplying opportunities, and demonstrating the importance of local procurement internally to staff. Being transparent about procurement processes and providing practical information to suppliers costs relatively little, but makes a world of difference for suppliers and their supporting institutions. I visited Golden Star's operations in January 2020 and was particularly impressed by the way in which the business case for local procurement was understood by procurement and community team staff. In addition, the LOCOMS model of bringing together multiple entrepreneurs into one business entity is a model that should be explored by other mining companies in Ghana and beyond.

**JEFF GEIPEL**  
FOUNDER, MANAGING DIRECTOR  
Mining Shared Value

## LOCAL VALUE RETENTION THROUGH LOCAL PROCUREMENT

### Local Procurement Leadership and Transparency

One of the primary benefits of our operations is the local business opportunities created to provide goods and services to our operations. We therefore aim to procure goods and services from our host communities as far as practicable without compromising safety and quality. By doing so, we support SDG 8: Decent Work and Economic Growth.

We are committed to leadership and transparency in our local procurement approach and performance. To achieve this, we are pleased to support the *Mining Local Procurement Reporting Mechanism (Mining LPRM)*, a comprehensive local procurement reporting framework for mining companies globally. The framework was established by Mining Shared Value – an initiative of Engineers Without Borders – with support from the German international development agency, Gesellschaft für Internationale Zusammenarbeit (GIZ). It provides a streamlined approach to key local procurement information and performance data, while providing tools for improving performance over time.

We have reported on the Mining LPRM in a manner that mirrors our GRI Standards reporting and will further align to the Mining LPRM in 2020 to strengthen our overall approach to local procurement.

### Our Local Procurement Approach and Performance

Golden Star recognizes that vibrant regional communities rely on diversified economies. We continue to focus on developing the capacity of local businesses, to retain a larger proportion of the value that is derived from the presence of our business, so that people in the local areas impacted by our operations more directly benefit.

Our actions to enhance local procurement participation fully align with the Ghanaian Minerals and Mining Regulations, which require procurement of certain goods and services with Ghanaian content. The procurement plans that we submit for approval, contain provisions for Ghanaian procurement targets as well as mechanisms to support suppliers to obtain contracts. Comprehensive plans are submitted every five years, with revisions made annually, and we report to the Ghanaian Minerals Commission on a semi-annual basis to demonstrate progress.

At Golden Star our aim is to not only meet these statutory requirements, but also to surpass them, including by focusing on opportunities for companies local to our operations. In the context of our operations we have established three categories in procurement – international, Ghanaian and local, with local representing companies that have their 'roots' in our catchment communities.



A land-mark pilot program in 2015, led to the formation of Local Companies in Mining Services (LOCOMS) a collaboration of 18 new local SMEs that attracted business opportunities that previously would have been directed to larger companies outside our host communities. During their partnership with Golden Star, LOCOMS have supplied hundreds of items of heavy equipment, directly employed over 250 people and attracted over US\$27 million in payments, thus strongly contributing to the re-invigoration of the local economy. This initiative was recognized at the 2016 Ghana Mining Industry Awards as leading practice and in 2018, LOCOMS were themselves recognized in the category of Mine Supplies and Services.

A follow-up program in 2018 supported a further 432 SMEs to establish new income streams for business diversification. Following the success of this and with the LOCOMS model serving as an official vehicle for liaison and mentoring, in 2019 Golden Star commenced a partnership with GIZ E4D entitled "Community-driven empowerment through skills and enterprise development in Ghana".

At our operations, we have established agreements / MOUs that incorporate local contract provisions for local communities. As an example, at our Wassa operations, local communities have right of first refusal over specific categories of contracts, including quarrying, heavy equipment, and scrap materials and equipment. In addition, preference is given to contracts with higher local content when the overall procurement scoring is within five percent.

At both Bogoso/Prestea and Wassa, we regularly communicate procurement opportunities through our established consultation processes, including regular meetings with community based consultation committees. Procurement opportunities are also communicated through our community liaison offices located within our local catchment and impact communities. In addition, we maintain registries of local suppliers as part of our local procurement plans.

All local suppliers are required to follow all applicable Ghanaian laws as well as Golden Star's policies and standards as a condition of contract. These cover business conduct and ethics (including anti-corruption and bribery), human rights, the environment and community development and support. As required, we provide training on these policies to help ensure effective implementation and compliance.

We follow our existing due diligence processes for the procurement of contracts. All potential contractors undergo screening to identify potential risks, including potential non-compliance with our corporate and site-level policies.

We work to further support community development through our relationships with local suppliers. At Bogoso/Prestea, all companies who have secured contracts through LOCOMS contribute 1% of contract value to a designated community project supported by Golden Star. As part of our community MoUs at Wassa, local companies that secure contracts over US\$0.5M must contribute 1% of contract values to the Golden Star Development Foundation for community projects.

Throughout 2020 we intend to advance our programs on local procurement, including the finalization of our *Policy on Local Content* and mapping of the local content plan against the Mining LPRM. These activities will guide us in the implementation of our partnership with GIZ E4D and assist us to effectively deliver the planned capacity building programs for our host communities, with the goal of enhancing SME business development opportunities with a focus on women and youth.



## RESPECTING HUMAN RIGHTS

We recognize the potential influence that our operations may have on the human rights of our stakeholders. This includes a broad spectrum of human rights as established by global human rights frameworks, such as the International Bill of Rights.

Our *Policy on Human Rights* outlines our commitment to respecting the human rights of our stakeholders in our sphere of influence. The policy is aligned with international best practice frameworks for business and human rights, including the UN Guiding Principles on Business and Human Rights as well as the Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises.

The policy applies across our business and to our contractors and suppliers, and we incorporate human rights clauses into all contracts. This helps ensure that we are not involved in negative human rights impacts through our business relationships, in line with the UN Guiding Principles.

We also evaluate human rights risks as part of our annual enterprise risk management system review. All of our operations are subject to these reviews.

As a member of the World Gold Council (WGC), we support the WGC Conflict Free Gold Standard. This requires that we conduct due diligence to help ensure we do not contribute to armed conflict through our operations or business activities. Our most recent assessment indicated that the jurisdiction in which we operate (i.e. Ghana) are not experiencing conflict and, as a result, our operations are at a low risk for conflict-related impacts. This includes our operational areas and the locations of our proved and probable reserves. Our full statement regarding our commitment to the WGC Conflict Free Gold Standard is available at [gsr.com/responsibility](http://gsr.com/responsibility).

In our 2018 Corporate Responsibility Report, we set a goal of zero legitimate human rights complaints against our company. After a review of our grievance mechanisms throughout the year, we have confirmed that we have achieved this goal. We will set a similar goal for 2020.

For 2019, we also set a goal of developing a broader inclusion and diversity policy for the company to expand our current *Diversity Policy* beyond our Board of Directors and senior management. We achieved this goal with the release of a *Policy on Inclusion and Diversity* to mark International Women's Day in 2020.



**STRENGTHEN**  
human rights systems  
for children



**ZERO**  
human rights  
complaints in 2019



Conflict Free Gold  
Standard Report to be  
released in 2020





# 36 INDEXES



## GRI INDEX

### General Disclosures

Disclosure	Description	Location/info
<b>ORGANIZATIONAL PROFILE</b>		
102-1	Name of the organization	2019 Corporate Responsibility Report, p. 2
102-2	Activities, brands, products, and services	2019 Annual Information Form, p. 12
102-3	Location of headquarters	London, United Kingdom
102-4	Location of operations	2019 Corporate Responsibility Report, p. 2
102-5	Ownership and legal form	2019 Annual Information Form, p. 8
102-6	Markets served	2019 Annual information Form, p. 13
102-7	Scale of the organization	
ai.	Total number of employees	See the 'Employment' tab in our 2019 ESG Data Tables
aii.	Total number of operations	2019 Corporate Responsibility Report, p. 2
aiii.	Net sales	2019 Financial Statements, p. 6
aiv.	Total capitalization	2019 Financial Statements, p. 7
av.	Quantity of products or services sold	2019 Management Discussion and Analysis, p. 5
102-8	Information on employees and other workers	2019 Corporate Responsibility Report, p. 16 – 17; see also the 'Employment' tab in our 2019 ESG Data Tables
102-9	Supply chain	2019 Corporate Responsibility Report, p. 32.
102-10	Significant changes to the organization and its supply chain	The company re-located its headquarters to London, UK. There were no significant changes to the company's supply chain.
102-11	Precautionary Principle or approach	2019 Corporate Responsibility Report, p. 22
102-12	External initiatives	United Nations Global Compact, Sustainable Development Goals, Extractives Industry Transparency Initiative, International Finance Corporation Performance Standard 5, Global Reporting Initiative, World Gold Council Conflict Free Gold Standard, International Cyanide Management Code (Wassa only), Sustainability Accounting Standards Board (SASB)
102-13	Membership of associations	Ghana Chamber of Mines and World Gold Council
<b>STRATEGY</b>		
102-14	Statement from senior decision-maker	2019 Corporate Responsibility Report, p. 4
<b>ETHICS &amp; INTEGRITY</b>		
102-16	Values, principles, standards, and norms of behavior	<a href="http://www.gsr.com/about-us/default.aspx">http://www.gsr.com/about-us/default.aspx</a>
102-17	Mechanisms for advice and concerns about ethics	2019 Corporate Responsibility Report, p. 14
<b>GOVERNANCE</b>		
102-18	Governance structure	2019 Corporate Responsibility Report, p. 15
<b>STAKEHOLDER ENGAGEMENT</b>		
102-40	List of stakeholder groups	See the 'Community' tab in our 2019 ESG Data Tables
102-41	Collective bargaining agreements	2019 Corporate Responsibility Report, p. 16
102-42	Identifying and selecting stakeholders	2019 Corporate Responsibility Report, p. 30 – 31
102-43	Approach to stakeholder engagement	2019 Corporate Responsibility Report, p. 30 – 31
102-44	Key topics and concerns raised	See the 'Community' tab in our 2019 ESG Data Tables



## General Disclosures continued

Disclosure	Description	Location/info
<b>REPORTING PRACTICE</b>		
102-45	Entities included in the consolidated financial statements	2019 Financial Statements, p. 6
102-46	Defining report content and topic Boundaries	2019 Financial Statements, p. 10
102-47	List of material topics	2019 Corporate Responsibility Report, p. 12 – 13
102-48	Restatements of information	Restatements are noted where applicable throughout the 2019 Corporate Responsibility Report.
102-49	Changes in reporting	Reporting has been updated to align with the Sustainability Accounting Standards Board (SASB) Metals and Mining Sustainability Accounting Standard, Investor Mining and Tailings Safety Initiative, and the World Gold Council Conflict Free Gold Standard.
102-50	Reporting period	1 January 2019 to 31 December 2019
102-51	Date of most recent report	August 2020
102-52	Reporting cycle	2019 full year.
102-53	Contact point for questions regarding the report	Philipa Varris (EVP, Head of Sustainability)
102-54	Claims of reporting in accordance with the GRI Standards	2019 Corporate Responsibility Report, p. 2
102-55	GRI content index	2019 Corporate Responsibility Report, p. 37 – 41
102-56	External assurance	Our 2019 ESG performance data was independently reviewed and verified by MF & Associates.

## Economic Performance

Disclosure	Description	Location/info
<b>GRI 201: ECONOMIC PERFORMANCE</b>		
201-1	Direct economic value generated and distributed	See our 'Value Sharing' tab in our 2019 ESG Data Tables
201-2	Financial implications and other risks and opportunities due to climate change	2019 Corporate Responsibility Report, p. 25
<b>GRI 203: INDIRECT ECONOMIC IMPACTS</b>		
203-1	Infrastructure investments and services supported	2019 Corporate Responsibility Report, p. 31
203-2	Significant indirect economic impacts	2019 Corporate Responsibility Report, p. 31; see also the 'Energy and Emissions' tab in our 2019 ESG Data Tables
<b>GRI 204: PROCUREMENT PRACTICES</b>		
204-1	Proportion of spending on local suppliers	2019 Corporate Responsibility Report, p. 32; see also the 'Local Procurement' tab in our 2019 ESG Data Tables
<b>GRI 205: ANTI-CORRUPTION</b>		
205-1	Operations assessed for risks related to corruption	2019 Corporate Responsibility Report, p. 14
205-2	Communication and training about anti-corruption policies and procedures	2019 Corporate Responsibility Report, p. 14 – 15
205-3	Confirmed incidents of corruption and actions taken	2019 Corporate Responsibility Report, p. 15
<b>GRI 206: ANTI-COMPETITIVE BEHAVIOUR</b>		
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Zero

## Environment

Disclosure	Description	Location/info
<b>GRI 302: ENERGY</b>		
302-1	Energy consumption within the organization	2019 Corporate Responsibility Report, p. 24; See also the 'Energy and Emissions' tab in our 2019 ESG Data Tables
302-2	Energy consumption outside the organization	Data not available. Our 2019 reporting focus was on internal energy consumption.
302-3	Energy intensity	2019 Corporate Responsibility Report, p. 24; see also the 'Energy and Emissions' tab in our 2019 ESG Data Tables
<b>GRI 303: WATER AND EFFLUENTS</b>		
303-1	Interactions with water as a shared resource	2019 Corporate Responsibility Report, p. 23
303-2	Management of water discharge-related impacts	2019 Corporate Responsibility Report, p. 23
303-3	Water withdrawal	2019 Corporate Responsibility Report, p. 23; see also the 'Water' tab in our 2019 ESG Data Tables
303-4	Water discharge	2019 Corporate Responsibility Report, p. 23; see also the 'Water' tab in our 2019 ESG Data Tables
303-5	Water consumption	2019 Corporate Responsibility Report, p. 23; see also the 'Water' tab in our 2019 ESG Data Tables
<b>GRI 305: EMISSIONS</b>		
305-1	Direct (Scope 1) GHG emissions	2019 Corporate Responsibility Report, p. 24; see also the 'Energy and Emissions' tab in our 2019 ESG Data Tables
305-2	Energy indirect (Scope 2) GHG emissions	2019 Corporate Responsibility Report, p. 24; see also the 'Energy and Emissions' tab in our 2019 ESG Data Tables
305-4	GHG emissions intensity	2019 Corporate Responsibility Report, p. 24; see also the 'Energy and Emissions' tab in our 2019 ESG Data Tables
305-7	"Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions"	See the 'Energy and Emissions' tab in our 2019 ESG Data Tables
<b>GRI 306: EFFLUENTS AND WASTE</b>		
306-1	Water discharge by quality and destination	2019 Corporate Responsibility Report, p. 26; see also the 'Water' tab in our 2019 ESG Data Tables
306-2	Waste by type and disposal method	See the 'Waste and Materials' tab in our 2019 ESG Data Tables
306-3	Significant spills	2019 Corporate Responsibility Report, p. 22
<b>GRI 307: ENVIRONMENTAL COMPLIANCE</b>		
307-1	Non-compliance with environmental laws and regulations	2019 Corporate Responsibility Report, p. 22



## Social

Disclosure	Description	Location/info
<b>GRI 403: OCCUPATIONAL HEALTH AND SAFETY</b>		
403-1	Occupational health and safety management system	2019 Corporate Responsibility Report, p. 18
403-2	Hazard identification, risk assessment, and incident investigation	2019 Corporate Responsibility Report, p. 18
403-3	Occupational health services	2019 Corporate Responsibility Report, p. 18
403-4	Worker participation, consultation, and communication on occupational health and safety	2019 Corporate Responsibility Report, p. 18
403-5	Worker training on occupational health and safety	2019 Corporate Responsibility Report, p. 18
403-6	Promotion of worker health	2019 Corporate Responsibility Report, p. 18 – 19
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	2019 Corporate Responsibility Report, p. 18 – 19
403-8	Workers covered by an occupational health and safety management system	2019 Corporate Responsibility Report, p. 18 – 19
403-9	Work-related injuries	See the 'Health and Safety' tab in our ESG Data Tables
403-10	Work-related ill health	See the 'Health and Safety' tab in our ESG Data Tables

<b>GRI 404: TRAINING AND EDUCATION</b>		
404-1	Average hours of training per year per employee	2019 Corporate Responsibility Report, p. 16
404-2	Programs for upgrading employee skills and transition	2019 Corporate Responsibility Report, p. 16
404-3	Percentage of employees receiving regular performance and career development reviews	All employees receive these reviews annually.
<b>GRI 405: DIVERSITY AND EQUAL OPPORTUNITY</b>		
405-1	Diversity of governance bodies and employees	2019 Corporate Responsibility Report, p. 14

<b>GRI 406: NON-DISCRIMINATION</b>		
406-1	Incidents of discrimination and corrective actions taken	Zero incidents in 2019.

<b>GRI 407: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING</b>		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Zero. Both of our mine sites have unions in place and these are protected under Ghanaian law.

<b>GRI 408: CHILD LABOUR</b>		
408-1	Operations and suppliers at significant risk for incidents of child labor	Zero.

<b>GRI 409: FORCED OR COMPULSORY LABOUR</b>		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Zero.

<b>GRI 412: HUMAN RIGHTS ASSESSMENT</b>		
412-1	Operations that have been subject to human rights reviews or impact assessments	2019 Corporate Responsibility Report, p. 33

Disclosure	Description	Location/info
<b>GRI 412: HUMAN RIGHTS ASSESSMENT CONTINUED</b>		
412-2	Employee training on human rights policies or procedures	2019 Corporate Responsibility Report, p. 35
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	2019 Corporate Responsibility Report, p. 35
<b>GRI 413: LOCAL COMMUNITIES</b>		
413-1	Operations with local community engagement, impact assessments, and development programs	2019 Corporate Responsibility Report, p. 30-31
413-2	Operations with significant actual and potential negative impacts on local communities	All operations have the potential for significant impacts – both positive and negative – on local communities.
<b>GRI 419: SOCIOECONOMIC COMPLIANCE</b>		
419-1	Non-compliance with laws and regulations in the social and economic area	Zero.
<b>Mining metals supplement</b>		
Disclosure	Description	Location/info
<b>GRI G4 MINING AND METALS SUPPLEMENT</b>		
MM-1	Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated.	See also the 'Rehabilitation and Closure' tab in our 2019 ESG Data Tables.
MM-2	The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place.	2019 Corporate Responsibility Report, p. 22
MM-3	Total amounts of overburden, rock, tailings, and sludges and their associated risks	See the 'Waste and Materials' tab in our 2019 ESG Data Tables
MM-4	Number of strikes and lock-outs exceeding one week's duration, by country.	Zero
MM-5	Total number of operations taking place in or adjacent to Indigenous Peoples' territories, and number and percentage of operations or sites where there are formal agreements with Indigenous Peoples' communities.	Zero
MM-6	Number and description of significant disputes relating to land use, customary rights of local communities and Indigenous Peoples.	Zero
MM-7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and Indigenous Peoples, and the outcomes.	N/A
MM-8	Number (and percentage) of company operating sites where artisanal and small-scale mining (ASM) takes place on, or adjacent to, the site; the associated risks and the actions taken to manage and mitigate these risks.	Corporate Responsibility Report p. 27 Both of Golden Star's operations operate near areas where ASM takes place.
MM-9	Sites where resettlements took place, the number of households resettled in each, and how their livelihoods were affected in the process.	Zero
MM-10	Number and percentage of operations with closure plans.	2019 Corporate Responsibility Report, p. 24



## SASB Index

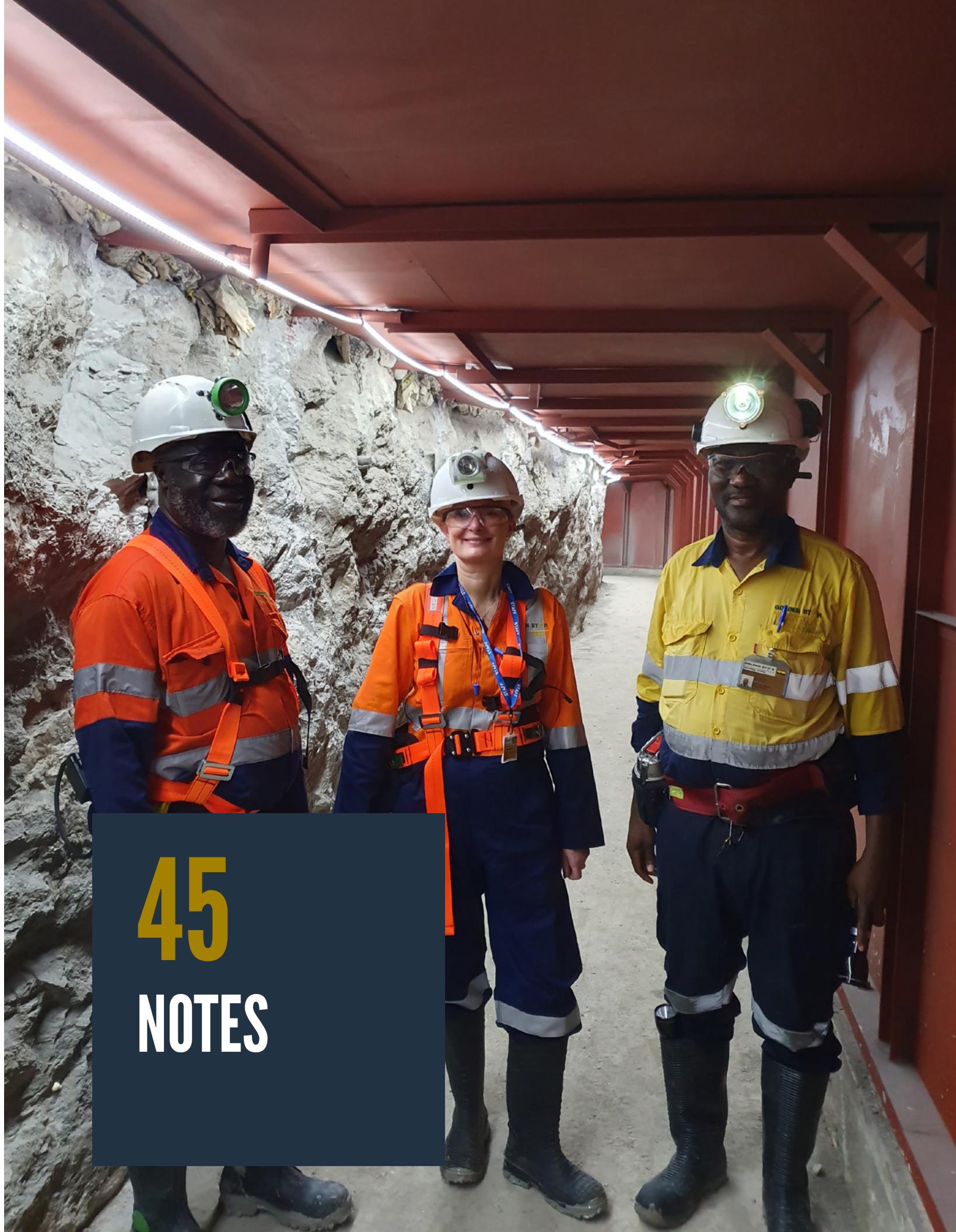
SASB code	Description	Location/info
<b>GREENHOUSE GAS EMISSIONS</b>		
EM-MM-110a.1	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	See the 'Energy and Emissions' tab in our 2019 ESG Data Tables
EM-MM-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	2019 Corporate Responsibility Report, p. 24
<b>AIR QUALITY</b>		
EM-MM-120a.1	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N2O), (3) SOx, (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	Data not fully available. NOx and SOx emissions resulting from the company's operations are minimal and are multiple orders of magnitude less than the regulatory requirements specified by the Ghanaian EPA.
<b>ENERGY MANAGEMENT</b>		
EM-MM-130a.1	(1) Total energy consumed	See the 'Energy and Emissions' tab in our 2019 ESG Data Tables
	(2) percentage grid electricity	See the 'Energy and Emissions' tab in our 2019 ESG Data Tables
	(3) percentage renewable	See the 'Energy and Emissions' tab in our 2019 ESG Data Tables
<b>WATER MANAGEMENT</b>		
EM-MM-140a.1	(1) Total fresh water withdrawn	See the 'Water' tab in our 2019 ESG Data Tables
	(2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Zero
EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Zero
<b>WASTE AND MATERIALS MANAGEMENT</b>		
EM-MM-150a.1	Total weight of tailings waste, percentage recycled	See the 'Waste and Materials' tab in our 2019 ESG Data Tables
EM-MM-150a.2	Total weight of mineral processing waste, percentage recycled	See the 'Waste and Materials' tab in our 2019 ESG Data Tables
EM-MM-150a.3	Number of tailings impoundments, broken down by MSHA hazard potential	2019 Tailings Management Report
<b>BIODIVERSITY</b>		
EM-MM-160a.1	Description of environmental management policies and practices for active sites	2019 Corporate Responsibility Report, p. 22
EM-MM-160a.2	Percentage of mine sites where acid rock drainage is:	
	(1) predicted to occur	Acid rock drainage is only predicted to occur at our Bogoso/Prestea operations. We actively mitigate associated risks including through treatment of impacted water.
	(2) actively mitigated (3) under treatment or remediation	
EM-MM-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Zero

SASB code	Description	Location/info
<b>SECURITY, HUMAN RIGHTS, AND RIGHTS OF INDIGENOUS PEOPLES</b>		
EM-MM-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Zero percent. None of our operations or exploration projects are located in or near areas of conflict, as defined by the Uppsala Institute or the Heidelberg Conflict Barometer.
EM-MM-210a.2	Percentage of (1) proved and (2) probable reserves in or near Indigenous land	Zero percent. None of our operations or exploration projects are located are located in or near Indigenous lands.
EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Not applicable as our operations are not located in areas of conflict.
<b>COMMUNITY RELATIONS</b>		
EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	2019 Corporate Responsibility Report, p. 30
EM-MM-210b.2	Number and duration of non-technical delays	Zero
<b>LABOUR RELATIONS</b>		
EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	79%
EM-MM-310a.2	Number and duration of strikes and lockouts	Zero
<b>WORKFORCE HEALTH AND SAFETY</b>		
EM-MM-320a.1	(1) All-incidence rate	See the 'Health and Safety' tab in our 2019 ESG Data Tables
	(2) fatality rate	See the 'Health and Safety' tab in our 2019 ESG Data Tables
	(3) near miss frequency rate (NMFR)	See the 'Health and Safety' tab in our 2019 ESG Data Tables
	(4) average hours of health and safety training	See the 'Health and Safety' tab in our 2019 ESG Data Tables
<b>BUSINESS ETHICS AND TRANSPARENCY</b>		
EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	2019 Corporate Responsibility Report, p. 14 – 15
EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Zero
<b>ACTIVITY METRICS</b>		
EM-MM-000.A	Production of (1) metal ores and (2) finished metal products	2019 Management Discussion and Analysis, p. 5
EM-MM-000.B	Total number of employees, percentage contractors	See the 'Employment' tab in our 2019 ESG Data Tables



## Local Procurement Reporting Mechanism Index

Indicator	Description/location
<b>LPRM 100: CONTEXT FOR LOCAL PROCUREMENT DISCLOSURES</b>	
Mining company name	Golden Star Resources
Mine site name	Golden Star (Bogoso/Prestea) Limited (GSBPL) & Golden Star (Wassa) Limited (GSWL)
Reporting period	1 January 2019 to 31 December 2019
Stage of assets	Operational
Estimated mine life	Current mine plans project a 5 year mine life for Prestea and 10 year remaining mine life for Wassa
Average number of workers	See the 'Employment' tab of our 2019 ESG Data Tables.
<b>LPRM 200: PROCUREMENT SYSTEMS</b>	
201: Policy on local suppliers	Corporate Responsibility Report, p. 33 – 34
202: Accountability on local suppliers	Local procurement accountability rests with the site-level Community and Finance departments.
203: Major contractors and local suppliers	Corporate Responsibility Report, p. 31 – 32
204: Procurement process	Corporate Responsibility Report, p. 31 – 32
<b>LPRM DISCLOSURE 300: LOCAL PROCUREMENT SPENDING BY CATEGORY</b>	
301: Categorising suppliers	Corporate Responsibility Report, p. 33
302: Breakdown of procurement spend	Corporate Responsibility Report, p. 34; see also the 'Local Procurement' tab in our 2019 ESG Data Tables.
<b>LPRM DISCLOSURE 400: LOCAL PROCUREMENT DUE DILIGENCE</b>	
401: Due diligence process	Corporate Responsibility Report, p. 33 – 34
402: Anti-corruption policy	Corporate Responsibility Report, p. 14 – 15
403: Training and guidance for suppliers	Corporate Responsibility Report, p. 33 – 34
<b>LPRM DISCLOSURE 500: METHODS TO INCENTIVIZE LOCAL PROCUREMENT</b>	
501: Commitments	Corporate Responsibility Report, p. 32 – 33
502: Preference in scoring of bids	Corporate Responsibility Report, p. 33
503: Preference in scoring of bids for significant local contributions	Corporate Responsibility Report, p. 33
504: Non-scoring methods to incentivize local purchasing	Corporate Responsibility Report, p. 33
505: Supporting suppliers to understand the tender process	Corporate Responsibility Report, p. 33 – 34
506: Special payment procedures for local suppliers	Contracts are paid according to existing company procedures.
507: Encouraging procurement from particular groups	Corporate Responsibility Report, p. 33 – 34
<b>LPRM DISCLOSURE 600: EXTERNAL COMMITMENTS AND OBLIGATIONS</b>	
601: Regulations	Corporate Responsibility Report, p. 33
602: Other agreements and contracts	Corporate Responsibility Report, p. 33 – 34





## PHOTOGRAPHIC CREDITS

Natalie Raffield, Philip Mostert, Kingkwekuananse Photography and the Golden Star team

## GLOSSARY

<b>AIFR</b>	All Injury Frequency Rate
<b>ANCOLD</b>	Australian National Commission on Large Dams
<b>CCC</b>	Community Consultative Committees
<b>CCFPA</b>	Canadian Corruption of Foreign Public Officials Act
<b>CDA</b>	Canadian Dam Association
<b>CEO</b>	Chief Executive Officer
<b>CMCC</b>	Community Mine Consultative Committees
<b>EITI</b>	Extractives Industry Transparency Initiative
<b>EMP</b>	Environmental Management Plan
<b>EPA</b>	Environmental Protection Agency
<b>ERM</b>	Enterprise Risk Management
<b>ESG</b>	Environmental, Social, and Governance
<b>ESIA</b>	Environmental and Social Impact Assessment
<b>ESTMA</b>	Extractives Sector Transparency Measures Act
<b>EVP</b>	Executive Vice President
<b>FCPA</b>	Foreign Corrupt Practices Act
<b>GHG</b>	Greenhouse Gas
<b>GIZ</b>	Gesellschaft für Internationale Zusammenarbeit
<b>GJ</b>	Gigajoules
<b>GRI</b>	Global Reporting Initiative
<b>GS LEAD</b>	Golden Star Leaders Empowerment and Development Program
<b>GSOPP</b>	Golden Star Oil Palm Plantation
<b>ICMC</b>	International Cyanide Management Code
<b>ICOLD</b>	International Commission on Large Dams
<b>IRS</b>	Indoor Residual Spraying
<b>ISO</b>	International Standards Organization
<b>IUCN</b>	International Union for Conservation of Nature
<b>LOCOMS</b>	Local Companies in Mining Services
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>SASB</b>	Sustainability Accounting Standards Board
<b>SDGs</b>	Sustainable Development Goals
<b>TCFD</b>	Taskforce on Climate Related Financial Disclosures
<b>TRIFR</b>	Total Recordable Injury Frequency Rate
<b>TSF</b>	Tailings Storage Facility
<b>UN</b>	United Nations
<b>WGC</b>	World Gold Council

## CAUTIONARY STATEMENT

Information contained in this report, which are not statements of historical facts, and the documents incorporated by reference herein, may be "forward-looking information" for the purposes of Canadian securities laws or "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995. Forward-looking information and statements are made based upon certain assumptions and judgments of management regarding future events and results, as well as other important factors that, if untrue, could cause the actual results, performance or achievements of Golden Star to differ materially from future results, performance or achievements expressed or implied by such statements. Although Golden Star has attempted to identify important factors that could cause actual results, performance or achievements to differ materially from those described in forward-looking information and statements, there may be other factors that cause actual results, performance or achievements not to be as anticipated, estimated or intended. Forward-looking information and statements are subject to known and unknown risks, uncertainties and other important factors that may cause the actual results, performance or achievements of Golden Star to be materially different from those expressed or implied by such forward-looking information and statements. Please refer to the factors discussed in the section entitled "Risk Factors" in Golden Star's annual information form for the year ended December 31, 2019. Although Golden Star has attempted to identify important factors that could cause actual results, performances and achievements to differ materially from those contained in forward-looking information and statements, there may be other factors that cause results, performance and achievements not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results, performance, and achievements and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information and statements. Forward-looking information and statements are made as of the date hereof and accordingly are subject to change after such date. Forward-looking information and statements are provided for the purpose of providing information about management's current expectations and plans and allowing investors and others to get a better understanding of the Company's operating environment. Golden Star does not undertake to update any forward-looking information and statements that are included in this Report, except as required by applicable securities laws.