

# Appian Annual Sustainability Report September 2021

Committed to best-in-class health, safety, environmental and social management

**Strictly Private & Confidential** 

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## INTRODUCTION

# Appian Capital Advisory LLP ('Appian') is committed to best-in-class health, safety, environmental and social management at its investments.

Appian regards social, environmental and governance standards as crucial elements within all investment opportunities and is committed to working to ensure that all portfolio companies adhere to international best standards. Mining requires collaboration from all stakeholders to support the project development in return for the greater social and financial benefit that a mine can bring to isolated communities and governments.

As part of Appian's 360° due diligence process, the team reviews both the social and environmental aspects associated with all potential investment opportunities. This process generally involves a comprehensive review of existing environmental plans, rehabilitation and closure strategy, local legislation and permitting requirements, local communities and other operating mines in the region.

The Appian team is keenly aware of the continuous need for the social license to operate and ensures all projects and investment opportunities evaluated have a well-established and long-term workable social license.

When Appian invests, implementing a Tier 1 approach becomes part of the investee company culture, and we are very clear about our expectations from day one.

#### About this Report

This is Appian's Annual Sustainability Report which highlights our portfolio companies' ESG performance. The Report also includes an update on the activities of the Appian Way Charitable Foundation ('AWCF').

Our report covers the activities of all our operations and investments from July 2020 to June 2021.

Appian regards social, environmental and governance standards as crucial elements within all investment opportunities.



#### TECHNICAL

- 1. Geology, resource quality and exploration
- 2. Mine plan and feasibility
- 3. Processing
- 4. Development
- 5. Fatal flaw analysis
- Optimisation / cost streamlining
  Logistics and access to market

#### QUALITATIVE

- 1. Management quality
- 2. Country
- 3. Mineral and surface rights / title
- 4. Permitting process
- 5. Environmental and social impact
- 6. Health and safety
- 7. Community engagement

#### FINANCIAL

- 1. Entry valuation
- 2. Deal structure
- Commodity fundamentals
  Returns-Multiple of Money
- Returns Multiple of
  Financeability
- Ability to exit
- M&A opportunities
- 8. IPO (equity story)

## ABOUT APPIAN

# Appian is a long-term value investor, delivering outsized returns through investments into down-side protected assets within the metals and mining sector.





## Appian is a signatory to the United Nation's Principles for Responsible Investment ('UNPRI')

- The Principles are a set of internationally accepted guidelines, which ensure that all signees adhere to best-in-class responsible investment practices in relation to environmental, social and governance ('ESG') issues
- Appian has been a member since founding and, in signing the Principles, we publicly commit to adopt and implement them, where consistent with our fiduciary responsibilities
- All of Appian's portfolio companies have adopted and abide by the United Nation's health, safety and community standards

#### 

## IFC is a partner with Appian on all African investments completed to date

The partnership with IFC provides an environmental and social performance framework in which investee companies must operate and serves to validate the code of ethics by which Appian's portfolio companies operate



#### Appian supports the DPI's Responsible Sourcing initiative

In September 2021, Appian joined The Development Partner Institute (DPI Mining) as a support for the Responsible Sourcing Coalition for Minerals and Metals ('RESCO'). RESCO exists to accelerate a mineral value chain free from inequality, shaped by community values and committed to a mindset of long-term value creation. The Coalition is made up of future-thinkers from every part of the mining value chain. DPI Mining and Appian share a long-standing deep commitment to harnessing mining for wide social and economic development. In partnership with Appian Capital, Schneider Electric and The Rockefeller Foundation, RESCO is continuing through 2021 to lead a multi-stakeholder effort to identify and fill gaps in the whole of value chain conversation.

#### Positive impact on local economies

- Appian's portfolio companies have created around 5,000 direct jobs in remote and rural communities, and ~11,000 jobs more indirectly
- A 4:1 multiplier effect on indirect job creation is typical for mining (conservatively, we use 2.3x)
- Appian encourages portfolio companies to hire locally wherever possible
- The large majority of Atlantic Nickel, MVV, Roxgold and Peak employees are local residents
- Atlantic Nickel, MVV, Harte, Roxgold and Kalbar continue to preferentially grant goods and services contracts to local suppliers

## Tier 1 safety standards are enacted across the portfolio

- Portfolio companies consistently exhibit best-in-class operations
- Appian sends its safety experts to work alongside management to implement best-in-class procedures across portfolio

#### Sustainable long-term benefits to local communities

- Sponsorship of teacher training initiative
- Construction of classrooms, water wells and improved accommodations
- Nurseries developed to facilitate the continuous rehabilitation of disturbed areas
- Funding to support new community enterprise schemes
- Establishment of a fire station
- Music and Arts project
- Women Entrepreneurs and Poultry Farm project

### MESSAGE FROM NELSON SILVA APPIAN'S SENIOR STRATEGY AND SOCIAL PERFORMANCE ADVISOR



I hope you will enjoy reading this report. For us, it presents an opportunity to share and acknowledge our portfolio companies' efforts in adhering to international best standards where corporate social responsibility is concerned.

2020 has been an extraordinary year in the life of Appian. Despite the challenges posed by COVID-19, we managed to exit 4 investments and complete construction at the Serrote Copper-Gold mine ahead of schedule and under budget. Furthermore, a big focus of our efforts this year has been on sustainability.

Last year, the impact of climate change and how the mining industry can respond to it has been a topic of global debate. Under the 2015 Paris Agreement, 195 countries pledged to limit global warming to ideally not more than 1.5°C above preindustrial levels, leading to the decarbonization across industries and creating major shifts in commodity demand. Mining portfolio evaluation must then account for the potential decarbonization of all sectors and to address these challenges. At Appian, we take a close look at these trends and pay particular attention to how we can decarbonize our own operations so that we can create value for our investors within an actionable climate strategy and in a sustainable way.

Appian believes that mining, when done responsibly and correctly, promotes the sustainable and economic interests of our communities and accelerates the transition to a clean energy future. This belief is core to the adoption of our strategy, which focuses on the mining of future-friendly metals and expands our ESG - Environmental, Social and Governance - mission to not only include proactive management of risks inherent to our business (and seeking out global best practice to do so), but also use the opportunity we are given to positively impact our surrounding communities and environment. Recently, we noticed an acceleration of the adoption of ESG targets by all industries primarily due to public and investors' increased focus on environmental, social, and governance-related matters beyond financial aspects - to newly proposed standards and frameworks against which organizations are becoming to be measured. Appian's ESG agenda covers biodiversity, water management, mine tailings, air, noise, energy, carbon footprint, greenhouse gas and hazardous substances. We also closely monitor and manage human rights, land use, vulnerable people, gender, labor practices, worker/community health & safety, security, legal compliance, ethics, anti-bribery and corruption and transparency.

At Appian we see ESG as a way to bring these themes together in a purposeful way to the benefit of planet, people and our investors.

Appian's activities are acutely focused on sustainability, utilizing a differentiated approach that is highlighted by our strong ESG governance, approach to environmental stewardship, supported by significant investments in tailings management, operational safety programs and community initiatives and engagement.

Our focus on environmental stewardship is highlighted by our portfolio operations' commitment to optimize the usage of energy, water, and effective management of other resources, and to the transition to a low carbon economy which is tracked by way of self-reporting on greenhouse gas ('GHG') emissions in line with the GHG Protocol accounting standards of the World Business Council for Sustainable Development. Our Brazilian assets' GHG footprint benefits from sourcing power from the Brazilian grid, as renewable or carbon neutral sources account for 85% of the country's overall energy output, as well as strategic locations close to ports which minimizes the carbon footprint of in-land transportation. Beyond the grid, initiatives have been implemented to further reduce Scope 1 and Scope 2 GHG emissions at both our Brazilian operations including fuel switching and operational process improvements.

At the heart of Appian's ESG strategy is a focus on stakeholder engagement. Both the Santa Rita and Serrote Mines have a comprehensive Stakeholder Engagement Plan ('SEP') that was recently updated to align with internationally recognized standards and guidelines including mining-specific frameworks from AccountAbility, IFCMM and the IFC. The best ESG practices play an important and structural role in our business strategy, and we are very proud of being recognized — even internationally — for the work we are performing. An example of this recognition was the conclusion of the funding process of Mineração Vale Verde. This process highlighted the commitment of Appian and the companies in its portfolio with the best ESG practices.

We will maintain our focus on sustainability and will strive for continuous improvement in ESG performance.

I hope you will enjoy reading this report. For us, it presents an opportunity to share and acknowledge our portfolio companies' efforts in adhering to international best standards where corporate social responsibility is concerned.

Best wishes

#### Nelson Luiz Costa Silva

Senior Safety and Social Performance Advisor Appian Capital Advisory LLP

### APPROACH TO SUSTAINABILITY AND ESG PERFORMANCE



#### Appian is committed to supporting portfolio companies to conduct their operations ethically, with integrity and in compliance with all applicable laws and regulations.

To this end, Appian works collaboratively with senior management at the portfolio companies through risk workshops and questionnaires to enable communication and understanding of key focus areas.

Selecting and hiring good people is key in our approach to sustainability. Our employees understand and live by ethical standards and are able to lead by example. We have established a framework to offset and mitigate against risks encountered and are supported in our efforts by external firms with specific mining and jurisdiction experience.

Our Code of Conduct and Ethics serves as our ethical foundation underpinning every decision and action

We have put in place a unified anti-bribery and corruption policy which has been rolled out across all Appian portfolio companies and has been tailored to local situations where appropriate. We adhere to international best practices such as the UK Bribery Act ('UKB') and the US Foreign Corrupt Practices Act of 1977 ('FCPA'). These policies and guidelines encompass ESG, recruitment, contract management, engagement with and onboarding of third parties (including government representatives) and gifts/hospitality, to name but a few.

We ensure that there are robust whistleblower policies in each portfolio company which provide confidential and anonymous avenues to report any breaches directly to the CEO or to Appian so that employees can feel secure and protected in raising concerns about our operations.

We have introduced dedicated training sessions at our operations to explain to managers what is right and wrong with examples of issues and an explanation of required procedures

We adhere to a multi-party tendering process for all contracts. The number of tenders required depends on the materiality of the contract (e.g. 2 for geology core re-boxing and 4 for a LT drilling contract).

#### **ESG performance**

The long-term value creation that is core to Appian's mandate is not one-sided but is rather viewed as an opportunity to give back to local communities and the environment through the implementation of robust social programs and the adherence to Tier 1 environmental practices.

All of Appian's portfolio companies have delivered significant benefits to the local communities and stakeholders. We are believers in strong partnerships with local communities which has led to the implementation of numerous social programs and knowledge and skill advancements for the local stakeholders.

Each of Appian's existing portfolio companies maintains a comprehensive health, safety, environmental and community program. Beyond providing over 5,000 direct employment and training opportunities to remote communities, and thousands more indirectly, Appian's portfolio companies undertake a number of community initiatives, including but not limited to:

- Community infrastructure programs, including the construction of classrooms, health centers and water wells
- Local recruitment and vocational training from surrounding communities
- Preferential procurement from local suppliers and contractors
- Funding to support community enterprise schemes and business opportunities
- Appian encourages its portfolio companies to be equal opportunity companies. At Atlantic Nickel, ~16% of employees are women. 39% of employees of shared services, including IT, supply chain, legal accounting and finance, are female and at the site, 10% of all employees are women. At MVV, 20% of all employees are women

Health, safety, environmental and community programs consistently remain the top priority of all Appian portfolio companies throughout the life of the investment.

## THE APPIAN WAY CHARITABLE FOUNDATION ('AWCF')

The AWCF seeks to contribute to the health and equal education of the children in the communities and principal regions Appian invests into, with the aim of contributing to social advancement and improving long-term environmental stability in these regions.

The AWCF Trustees approved a social and community budget for Atlantic Nickel, Mineração Vale Verde and Kalbar of US\$2.25 million, with the new initiatives now being rolled out. This budget will be used to support social initiatives in the local communities as well as environmental measures. A substantial part of the budget is dedicated to the STEM teacher training initiative that the AWCF is cooperating on with Educando and UNEAL in Brazil.

# US\$2.25m

The AWCF Trustees approved a social and community budget for Atlantic Nickel, MVV and Kalbar of US\$2.25m

Members of the Women Entrepreneurs group selling their produce on-site at MVV



Environmental projects sponsored by Atlantic Nickel ('ATN') and Mineração Vale Verde ('MVV') include a revegetation project, a water circulation project, a solid waste management program and an initiative to restore degraded areas as well as environmental monitoring projects at both operations.

Social and community projects include a cocoa project, an initiative to support the firefighters' department of Bahia as well as a Music and Art project at ATN and a Women Entrepreneurs and Poultry Farming project as well as an initiative to support the Catingaa Guardians at MVV.

The STEM teacher training program has been a successful initiative. Throughout the 2-year program, more than 50 teachers from public elementary schools will be trained and 300 children will participate in the program. The pilot program was rolled out to 5 schools in Craibas (Alagoas), the region where MVV is located, in late 2020. At a later stage, it is planned to roll out the program with Educando and a regional partner in Bahia. AWCF sees a multiplier impact on the community by training teachers.

## 50 teachers



50 teachers in Alagoas will benefit from the full teacher training programme The initial number of children participating in the project will be around 300



On-site training with elementary public school teachers at Craíbas



MVV staff introducing on-site training with elementary public school teachers

Despite the challenging COVID-19 situation in Brazil which has impacted on school closures and resulted in delays to school re-openings, the initiative remains on track. The implementation phase started as planned with initial school visits in February; the first series of training workshops took place in February and March. Further on-site workshops and online training have been scheduled throughout the rest of 2021 and the first half of 2022. The initiative is scheduled to conclude in August 2022 with a final visit to the schools. In total, the programme will include 148 hours of training for primary school teachers.

The AWCF also oversees the Fingerboards Mineral Sands Community Grant Program ('FMSCGP') that was developed by Kalbar Operations PTY in late 2020 and rolled out in February 2021.

The FMSCGP aims to support community initiatives that enhance the quality of life, heritage, recreation and cultural opportunities and provide long lasting benefits to the wider community. Grant funding is available for projects within the educational, recreational, environmental and social field of the community in which the company operates.

The annual budget for the grant program is A\$40,000 with five grants of A\$2,000 each being provided four times a year. The grants must have a direct positive outcome for the local community, adding to a project in a positive and sustainable manner.

Two rounds of grants have already been granted. Recipients include a local community hall, a community garden, a sports club and a day care center.

Appian regards social, environmental and governance standards as crucial elements within all investment opportunities and portfolio companies.

# APPIAN CAPITAL BRAZIL

# ATLANTIC NICKEL

NICKEL-COPPER-COBALT, BRAZIL

# Santa Rita is a previously operating open pit nickel sulphide mine with an estimated processing capacity of 6.5Mt of ore annually.

The previous operators spent over US\$1bn on the existing processing plant and associated infrastructure, which is available for use and has been maintained in good working order. Appian has identified numerous mine/plant optimisation opportunities, which serve to reduce the operation's cost position and generate an attractive cash flow profile at conservative nickel prices. Appian and Atlantic Nickel have safely returned the mine into production since January 2020.



Atlantic Nickel's offices on site

Atlantic Nickel Santa Rita open pit site

# MINERAÇÃO VALE VERDE ('MVV')

COPPER-GOLD, BRAZIL

# The Serrote project is an advanced stage, de-risked greenfield copper-gold development asset that just completed construction in June 2021 and is ramping up for its first concentrate shipment expected in Q4.

Following acquisition, Appian completed an updated DFS outlining a 14-year mine life producing approximately 20 thousand tonnes of copper equivalent per annum in a premium, high grade concentrate.



Completion of the construction phase was attended by regional VIPs

Mineração Vale Verde at night

#### **Appian Capital Brazil**

Appian Capital Brazil was incorporated for the purpose of acquiring and consolidating the Appian Funds' 100% ownership of the Santa Rita and Serrote Mines. The Company's primary assets include two producing large-scale, modern, mechanized, open pit mines: the Santa Rita Mine, located in the state of Bahia, Brazil, and the Serrote Mine, located in the state of Alagoas, Brazil.

In addition to the on-site offices and operations, an in-country head office is maintained in Belo Horizonte, Minas Gerais, to promote an ongoing familiarity with and focus on the Company's operations.

#### Strong ESG Governance

The ESG standards that mining companies hold themselves to can vary widely, depending on the values of the owners and operators, the culture of the organization, and the regulatory or permitting requirements of the jurisdiction.

As believers that responsible investment is defined by an objective standard, Appian seeks to emulate global best practices regardless of the jurisdictions its portfolio companies operate in.

The IFC Performance Standards and more recently, the Initiative for Responsible Mining Assurance ("IRMA"), are the standards and guidelines that Appian has embraced as best practice.

The Company's approach to ensure that it is living up to these performance standards includes inviting external consultants, including but not limited to, ERM, RCS Global Group, and Ramboll to conduct gaps analyses on a regular basis. Environmental and social action plans are derived from these exercises and progress is tracked against closing each gap. Once each gap is closed, the Company repeats the cycle as it holds firm to the belief there is always something to improve on and this transparent approach helps bring new insights to its business and organization.

The Company's ESG function is managed by a Director of Corporate Affairs, People and Health, Safety and Environment (HSE), who is a member of the Executive Committee, with general oversight from the Board of Directors and a dedicated Health, Safety and Environment Committee. In addition, each site has its own ESG team with dedicated personnel, including a Health, Safety and Environment Manager and an Institutional, Community Relations & Communications Coordinator that support and advance ESG efforts at the mine. Each site-level ESG team reports both directly to the site General Manager as well as to the ESG & People Manager and Director at the Corporate Level.

Key corporate policies that the Company maintains include: the Code of Conduct, the Safety, Health, Environmental and Social Responsibility Policy, the Anti-Bribery and Corruption Policy, Whistleblower Policy, Human Rights Policy and a Grievance Mechanism that is aligned with guidance from the IFC Performance Standards, UNPRI, the International Council on Mining & Metals (ICMM), UN Guiding Principles on Business and Human Rights and ILO 169.

#### **Environmental Stewardship**

Environmental sustainability is a core element of Appian's strategy. Appian is focused on both managing responsively the impact of its operations on the environment and resources it uses, as well as contributing to the global effort toward addressing climate change.

#### Environmentally conscientious approach

The Company is committed to an environmentally conscientious approach to mining, with a general philosophy to avoid, reduce, neutralize, or offset negative effects arising from its mines' operational processes, including through proactively mitigating its greenhouse gas ("GHG") emissions footprint, optimizing the use of water as well as working toward biodiversity positive net impact.

The Company self-reports its GHG emission in line with the Greenhouse Gas Protocol standard. In 2019, the activities of Santa Rita resulted in the emission of 9.7 thousand tons of  $CO_2$ -e across Scope 1 and 2 (of which 5.9 thousand tons of  $CO_2$ -e of Scope 1 emissions) and those of Serrote resulted in the emission of 21 thousand tons of  $CO_2$ -e across Scope 1 and 2 (99% Scope 1 emissions).

#### Annual estimation of GHG emissions (Santa Rita)



Source: ERM (2021), based on data provided by Santa Rita

#### Annual estimation of GHG emissions (Serrote)



Source: ERM (2021), based on data provided by Serrote

The Company's Scope 1 and 2 GHG emissions are forecasted to peak in 2021 as the result of necessary vegetation suppression for the TSF heightening at Santa Rita. Aggregate Scope 1 and 2 GHG emissions across both sites are forecasted to decrease thereafter, primarily as a result of reduced vegetation suppression.

### ATLANTIC NICKEL AND MVV CONTINUED

The Company's GHG footprint benefits from sourcing power from the Brazilian grid, as renewable or carbon neutral sources account for 85% of the country's overall energy output. Brazil's access to cheap, renewable hydroelectric power (yielding a LOM energy cost <US\$0.05/kWh at Appian's operations) makes it the perfect location for minimizing the carbon footprint of battery metals production. Beyond the grid, the Company has implemented initiatives to reduce its Scope 1 and 2 GHG emissions, including fuel switching, operational process improvements and installation of solar panels at both sites.

Going forward, the Company plans to improve data capture and subject the Santa Rita Mine's inventory to external verification to further identify avenues for improvement of its GHG emissions.

Committed to the responsible use of natural resources, Appian has developed a comprehensive water management strategy to optimize the use of water and reduce the extraction of water from the environment through notably increasing reuse rates, with such performance target set at 85% or higher.

100%

100%

1800 2.000

16,000

Refining



Sources: IEA Brazil data & statistics: Clean TeO, Skarn Associates Limited Notes

Annual 2020 emission intensity

2 Serrote's CO2e intensity calculated as sum of scope 1, 2 & 3 emission estimates. 1.9 - 2.5 range indicates low/high tCO2e / t Cu Eq. production post ramp-up. LoM average emission intensity estimated to be 2.3tCO2e/t Cu Eq

In 2020, 71% of water was reused at the Santa Rita Mine (reaching 84% in December 2020), and the Serrote Mine has been designed to be reusing at site over 90% of the water used in the mineral process. Both sites are in low to medium water stressed areas.

#### **Biodiversity Action Plan**

Environmental conservation and preservation are baseline standards for Appian which develops procedures, plans, and actions to ensure that good practices are established to protect, re-establish and sustain biodiversity (fauna and flora) at both Santa Rita and Serrote. Biodiversity Action Plans have been developed for both sites, in line with IEC Performance Standards

Within the various environmental plans and programs developed by the Company to promote positive biodiversity impact, several activities (e.g. revegetation with native species, seedlings nurseries) are planned in collaboration with the local community to promote environmental training and education in the region.

In 2009, the Environmental Education Center (EEC) at Serrote was created, located at Fazenda Uruçu, five kilometers from the project's administrative office. The farm was purchased from a family of farmers who previously had raised dairy cattle. By purchasing the property, Serrote was able to keep the original architecture of the facilities, making minor adaptations to receive its target audience. The EEC is located within the legal reserve of the enterprise, which allows greater interaction for studies and observation of the biome, as well as enabling the collection of seeds to produce native seedlings.

## Comparison of traditional and optimized seedling production systems applied in three seedling nurseries at the EEC

Indicators	Traditional seedling production system	Optimized seedling production system		
Seedling nurseries size	168 m²	168 m²		
Productive capacity	24,000 seedlings per year	84,000 seedlings per year		
Waste generated	Plastic bags with a capacity of 2.6 l of substrate	Reusable plastic tubes with 290 ml substrate capacity		
Water consumption	2,880 m³ per year	2,880 m <sup>3</sup> per year		
Production costs	R\$0.70 per seedling	R\$0.70 per seedling		

Through lectures at its headquarters and in the region's schools on the Caatinga phyto physiognomy and other environmental issues, Serrote benefitted about 5,000 people in 2019, including teachers and students from schools in the project's Influence area, local universities and employees of the region.

The EEC produces more than 40 species of the Caatinga biome and has contributed to the planting of more than 40,000 specimens of native species in communities and urban areas, in addition to thousands of seedlings produced and planted in the Serrote project area. The EEC receives around 750 visitors a year (before the COVID-19 pandemic).

On December 13, 2019, because of its involvement in the conservation of the Caatinga's ecosystem, the Company received a UNESCO certificate and recognition as an "Advanced Post of the Caatinga Biosphere Reserve".

Santa Rita is also pursuing a revegetation project which was inaugurated on World Environment Day June 5, 2020, with an optimized irrigation system to ensure less water consumption. The expectation is to produce about 30,000 seedlings per year of species native to the Atlantic Forest. In 2020, 20 ha were recovered, and 8,948 seedlings were planted. In 2021, the Company aims to recover 50 ha and plant approximately 53,000 seedlings.

#### Significant investments in tailings management

Appian takes a rigorous approach to the design, engineering, and management of its Tailings Storage Facility ('TSF') and maintains continuous improvement processes to ensure full adherence to the Dam Safety Guidelines of the Canadian Dam Association.

Santa Rita's TSF was built in 2008 using the safest methodology available, under the highest technical and safety standards. Serrote's TSF design adheres to the highest international technical and safety standards, and is being built under the supervision of qualified technical experts from internationally renowned engineering firms. The TSFs at both assets are robust downstream raised rockfill dams designed by Wood plc, the acting Designer and Engineer of Record of both dams.

#### Construction methods

Downstream construction method



#### Other construction methods

Centerline method



Upstream method



Wood plc is a top-tier international engineering firm with full-time quality assurance staff. At Santa Rita, quality assurance and quality control ("QA/QC") is supported by 24-hour monitoring of construction by QA/QC inspectors. Automated monitoring is also in place with piezometers, water level and settlement markers, continuous video monitoring and regular drone surveys. Each TSF has its own dedicated maintenance and operation teams that carry out additional safety measures for the tailings dam which include daily operational routines and maintaining up-to-date response emergency plans in line with best practices. The Chief Operating Officer ensures TSF design and operations are executed according to plan and reports to both the Executive Committee and the Board of Directors.

#### Comprehensive strategy for rehabilitation and closure

As an integral part of its holistic sustainability long term strategy, Appian has established closure plans for both mines (including dam decommissioning and environmental recovery across the open pit and supporting structures) which will be constantly reviewed by the permitting authorities through the life of the operations at least every 5 years, as per current legislation.

Post closure, the dams at both Santa Rita and Serrote will receive a clay and organic soil layer before planting native species of flora. Natural drainage channels will be utilized to control rainwater and prevent it from entering the structure. Piles will receive forest cover to minimize the entry of oxygen and water to minimize the potential for acid rock drainage. Waste dumps will be covered with low permeability local borrow materials and fine rockfill for erosion protection to support vegetation growth and limit infiltration.

#### People: Fit For Purpose Strategy

At the heart of Appian's decision making is a business strategy that revolves around creating value for every stakeholder, which includes generating positive, fit for purpose impacts for the employees and the communities that make its business possible.

#### Commitment to "Zero Harm"

Safety is a precondition for everything the Company does. Both the Santa Rita and Serrote Mines have a comprehensive set of workforce health & safety programs focused on the health and physical integrity of both Company employees and third-party contractors. There is continuous investment in the workforce health and safety management practices at the mine sites, resulting in no fatalities at either the Santa Rita or the Serrote Mine in the past three years.

Specifically, Santa Rita and Serrote have both implemented extensive safety programs and procedures on site including:

- safety golden rules
- leading and lagging safety indicators
- visible felt leadership program (with 2,100+ visible felt leadership engagements at Santa Rita, and 1,000+ visible felt leadership engagements at Serrote between October 2019 and June 2021
- 166,000 hours in safety, health and environmental training at Santa Rita and 177,000+ hours at Serrote through June 2021
- contractor assessment framework
- inclusion of safety KPIs in 100% of performance contracts
- critical risks management frameworks
- programs which encourage the identification and reporting of safety risks at all levels

In order to strengthen the safety culture and develop the right behaviors, the first Safety Day was celebrated in 2020 in an effort to promote safety as an integral part of the Company's strategy supporting the delivery of the ultimate goal of Zero Harm.

### Accumulated rates of occupational injuries with and without lost time involving employees and third parties

	Santa Rita		Serrote	
Year	LTI	NLTI	LTI	NLTI
2019	0	2.20		
2020	0.60	1.19	0.35	1.25
January 2021	0.57	1.14	0.58	1.16
February 2021	0.54	1.63	0.57	1.14
March 2021	0.51	1.27	0.57	1.15
April 2021	0.25	1.23	0.57	1.14
May 2021	0.24	1.44	0.57	1.15
June 2021	0.24	1.89	0.59	1.46

Source: ERM (2021), based on data provided by Santa Rita and Serrote. For Serrote: targeted limit: 3.0

Notes: LTI = Lost time injury; NLTI= Non lost time injury; The accumulated rate is calculated based on the number of accidents multiplied by the value of man-hours worked (MHW) divided by 1 million.

#### Stakeholder engagement

At the heart of Appian's ESG strategy is a focus on stakeholder engagement. At the local level, Appian seeks to engage and develop a life cycle understanding of how responsible mining operations can contribute to local communities, its peoples and their development and well-being. Appian considers national development plans and applies a stringent set of environmental and social criteria in its investment and business decision-making to ensure it evaluates and manages the impacts on people and communities that may arise from its operations.

#### 

Appian practises a concept of Social Integration in lieu of the more traditional concept of Social License to Operate. Social Integration means that the Company is part of the territory just like any other member of the community or any other stakeholder. Like any other member of its communities, the Company debates, seeks alternatives, shares its learnings and is open to feedback including where the Company can improve, like in any constructive social setting. The solutions that the Company strives to find together with its stakeholders are viable, equitable and agreed.

Both the Santa Rita and Serrote Mines have a comprehensive Stakeholder Engagement Plan (SEP) that has been recently updated to align with internationally recognized standards and guidelines, including mining-specific frameworks including those from AccountAbility, ICMM and IFC.

#### A sustainable business based on the concept of social integration





Source: ERM, 2021.

Appian, through its operations and Stakeholder Engagement Plan, makes significant direct and indirect contributions to the local communities. The below figure summarizes the direct and indirect contributions that Appian makes to those communities.



#### Note

1. Estimated contribution to government over life of mine according to Technical Report

#### Prioritizing local hiring and suppliers

In addition, the Company is committed to prioritizing regional and local employees and suppliers at the Santa Rita and Serrote Mines, with a long term target to exceed 70%. At Santa Rita, 65% of employees were hired locally while 20% were hired regionally. At Serrote, 66% of employees were hired locally and 3% regionally.

The Company is committed to fostering an inclusive and rewarding culture for employees at the Santa Rita and Serrote Mines, as both sites were recognized with a 'Great Place to Work' certification, based on the results of a comprehensive employee Organizational Climate Survey.

Both Santa Rita and Serrote focus on the well-being and growth potential of employees through respectful relationships, treating all workers fairly and offering equal opportunities on recruitment and promotion, guided by transparent policies that foster diversity and inclusion. These commitments are expressed in the Company's Code of Conduct.

In 2021, Appian launched a new leadership and learning framework at each of the Santa Rita and Serrote Mines to support its people strategy of engagement and development of workers with a focus on succession planning, leadership and employment engagement and talent management, taking into account cultural, diversity and inclusion aspects.

#### Social investments and COVID-19 relief for local communities

Appian's Social Investment Strategy aims to ensure the sustainable development of its communities through creating and investing in various socio-environmental programs with well defined objectives in line with the United Nations' Sustainable Development Goals. A summary of some of the investments made to date are shown below at both Santa Rita and Serrote. A total budget of US\$1.9 million in expenditure has been approved across all programs in 2021.

In the wake of COVID-19, a concerted effort has been made by the Company to supplement its existing programs and contributions with additional measures focused on providing targeted relief for its employees and communities. Expenditures associated with these efforts primarily relate to the acquisition of rapid tests and providing dedicated infrastructure and supplies to accommodate COVID-19 frontline health professionals. Approximately 37,000 people have benefited directly from these initiatives.

#### Summary of social investments made to date at Santa Rita



Notes:

- 1. Training as assembler assistants, carpenters and bricklayers, among others
- 2. UNESCO recognition of conservation of Caatinga; and open to public for
- educational and environmental activities
- 3. In 2019, 50 local suppliers participated in tailor-made training programs sponsored by Serrote

#### The STEM Program



#### Human Rights & Indigenous Engagement

It is important to note that the Company's Human Rights Policy sets a framework for ensuring respect and protection of human rights. Our approach to Indigenous Engagement is formalized in our enhanced Book of Social Corporate Policies which we expect to be finalized by the end of the third guarter of 2021.

As a case study to our commitment to human rights, in 2019 Serrote identified an indigenous Quilombola Community 1 called Carrasco, located 4.5 km from Serrote, and set about developing a comprehensive and dedicated stakeholder engagement process. A summary of the actions to-date include:



The EIA did not identify traditional communities in the area of influence of the Serrote Mine



Appian recognized the existence of the Quilombola Community of Carrasco. In line with IFC Performance Standard 07, initiated engagement with Carrasco community

Serrote agreed with INCRA the format of the consultation process (FPIC). Still in 2020, Serrote started initiatives to support Carrasco on the preservation of their traditions

2021

Serrote lodged a specific long-term program to further support the preservation of the traditions of the Quilombola community

#### Source: ERM, 2021. Notes:

- Quilombola Communities are considered traditional people by Brazilian legislation (Decree no 6.040, 2007) and refer to descendants of Afro-Brazilian slaves that escaped slavery and forced labor in the 19th century and formed free isolated communities based on the common use of land and protection of unique cultural heritage. The legislation recognizes the Quilombola Community's right to possess the land where they live and produce
- 2. INCRA: Federal agency responsible for Quilombola's communities in Brazil
- 3. FPIC: The normal framework for FPIC consists of a series of legal international instruments including the United Nations' Declaration on the Rights of Indigenous People (UNDRIP), the International Labor Organization Convention 169 (ILO 169), and the Convention on Biological Diversity (CBD), among many others, as well as national laws. It allows them to give or withhold consent to a project that may affect them or their territories. Once they have given their consent, they can withdraw it at any stage. Furthermore, FPIC enables them to negotiate the conditions under which the project will be designed, implemented, monitored and evaluated. This is also embedded within the universal right to self-determination. (Food and Agriculture Organization of United Nations definition, 2016)

During the COVID-19 pandemic, the Company has held weekly virtual dialogues with the Carrasco Quilombola Community as part of the Free Prior Informed Consent (FPIC) engagement process and intends to continue the dialogue post-COVID.

One of the new socio-economic programs Appian is pursuing at Serrote in 2021 is a training program in the science, technology, engineering and math disciplines ("STEM"). The program is being run in partnership with the local government and the renowned non-governmental organization Educando which is currently present in more than 1,000 schools throughout Brazil.

The STEM partnership was rolled out in early 2021 across five schools, training approximately 50 teachers and helping more than 300 students. The program is designed to deliver world-class training and ongoing support to teachers and principals from underserved schools in Appian's area of influence, improving educational outcomes and reducing drop-out rates.

### ROXGOLD gold, burkina faso and côte d'ivoire

# Roxgold Inc. ('Roxgold') is a gold producer, developer and explorer active in Burkina Faso and Côte d'Ivoire.

Roxgold's flagship Yaramoko operation in Burkina Faso consists of two high-grade underground gold mines, the first of which achieved commercial production in 2016. The second mine, Bagassi South, was self-funded from operating cash flow and completed under budget and on time, entering commercial production in September 2019.

In June of 2021, the asset base was acquired by Fortuna Silver.



Definition drilling at Séguéla, Côte d'Ivoire

gold expanded process plant



#### **Health & Safety**

Roxgold's first priority is the health, safety and well-being of its people. The Company's safety and management approach is committed to the control and prevention of risks associated with its operations, along with an unwavering focus on continuing to develop employee knowledge of safety best practices at all seniority levels. Roxgold's health and safety (H&S) management system is aligned to the ISO 45001 occupational health and safety standard.

Roxgold's overall H&S performance was deemed satisfactory with only one lost time injury (LTI) since September 2018. The Lost Time Injuries Frequency Rate (TRIFR) per 1,000,000 hours worked (Roxgold and Contractors) was 0 in July 2021.



Health & Safety training

## 8,964 hours

88.3%

Locals training

Roxgold provided 8,964 hours of training to the general workforce

Following intensive local training, 88.3% of employees are from Burkina Faso (incl. contractors)

#### **Employee Engagement**

#### **Regular meetings and events**

Maintaining open and accessible communication channels between management and employees is accomplished through regular monthly meetings to discuss and manage issues that matter to the workforce. 14 meetings took place between management and staff representatives. Due to safety concerns relating to COVID-19, events were limited in 2020/2021.

#### Training and development

To ensure Roxgold's company culture is resilient, productive and collaborative, the Company provides its leaders with ongoing training so that they can build teams that demonstrate these strengths.

#### **Social Responsibility**

Roxgold's commitment to local stakeholders, since operations began in 2015, is to hire a minimum of 80% of unskilled workers from the communities nearby the mine.

Out of an average of 711 skilled workers at Yaramoko, 278 (39%) are from the communities living nearby the mine site and 265 (51%) are nationals coming from other areas of Burkina Faso.

Employees from nearby communities and Burkina Faso represented 42.6% and 87.1% respectively, of the entire workforce (Roxgold

employees and contractors) and 47.4% and 91.3%, respectively, for Roxgold only. Out of the 855 employees from all companies operating on the Yaramoko mine site, 12.9% are expatriates. For Roxgold, the expatriates represent only 8.7% of the workforce. There is an average of 112 women from all companies operating on the Yaramoko mine site, representing 13.1% of the total workforce and 12.1% of the total skilled workforce.

Roxgold developed local training programs to encourage local employment and opportunities for growth and development.

The Company believes that it is equally important to provide training opportunities outside of the mining industry such as skills development in traditional trades so that people can choose a career path that is not limited to the mining industry.

An important part of the economic impact story is Roxgold's commitment to ensure that goods and services are procured from the host and neighboring communities.

To support this effort, two local Roxgold suppliers – a vegetable supplier and a local employee transport provider – were invited to a conference organized in Bobo-Dioulasso to participate in Roxgold's presentation on the local supply of mining goods and services for the mining zones of western Burkina Faso. Roxgold shared its local supply strategy through forums and an exhibition space, and the local suppliers were invited to share their experiences and learn other ways of doing business in the mining sector.

In areas neighboring the mine site, US\$223,828 was spent for the year on goods and services. With the addition of two main contractors, ATS and AUMS, the local total expenditure for the year totalled US\$918,879. The COVID-19 crisis affected local procurement since the mine site had a reduced amount of non-essential activities and therefore a lower demand for associated supplies.





Covid incident response plan in action

Supporting the community in the fight against COVID-19 at local levels was the recent focus. At the local level, support included the donation of hygiene and medical equipment and materials, and financial support was provided to assist health care centers and youth and women's associations with awareness and training programs. Despite COVID-19, the monthly free medical consultations offered by the site doctors continued at the Bagassi health care center. No COVID-19 cases were registered in the villages nearby the mine.

### ROXGOLD CONTINUED

Beyond COVID-19 efforts, the development of a communication, information, education and awareness program for the local population (and Roxgold employees) on safety and control of STIs and HIV/AIDS is in progress. This program is in cooperation between Roxgold, contractor GAAM and the government's local health representatives.

Since 2015, the development of the Yaramoko Mine Complex resulted in impacts on farmland for some members of the community, and Roxgold implemented an LRP to help those affected. In 2020, this program included 443 hectares of fields ploughed by six local contractors, seed and fertilizer donations, supporting the production of more than 1,200 tonnes of crops such as corn, sorghum, Niébé, sesame and rice. The income-generating activities portion of this LRP included animal husbandry and its related components, such as food for the animals and veterinary services and resulted in revenue from the sale of local livestock. Training sessions were also provided to help farmers learn more about market potential, livestock trade opportunities and how to create cooperatives.

Another LRP activity saw Roxgold and local authorities reach an agreement to make land available for a market gardening program for women of the households concerned by the Bagassi South mine extension in 2018. Site clearing and other land preparation is complete, and the construction of irrigation components has started. The women who will be beneficiaries of the market garden for their households chose their produce preferences through focus groups.

Roxgold believes it is important to work closely with the local community to help preserve local cultural heritage and traditions.

Opportunities for the Company to participate in local cultural heritage events and projects were limited due to COVID-19 restrictions in 2020; however, Roxgold was pleased to attend the Burkina Faso Independence Day celebrations and the annual traditional ceremony held in the village where the Company was recognized for its consideration, respect and support to culture conservation.

#### **Community investment program**

The Community development plan plays a significant role in Roxgold's ESG strategy and supports initiatives in the following six main categories that aim to directly improve the well being of communities in proximity to the mine: community investment, cultural heritage, community health and safety, local procurement, road infrastructures and local employment.

Since 2020, the Community Investment Program has been led by local authorities as per the memorandum for contribution to the Local Development Mining Fund (LDMF) signed between Roxgold and the government. Burkina Faso's new mining code requires that mining companies contribute up to 1% of their annual gross revenue to this fund: 50% of the contribution made by Roxgold will go to the municipality of Bagassi for social development projects, with the remainder dispersed to other regions and municipalities throughout the country. To date, Roxgold has contributed approximately US\$3.2 million to the Bagassi municipality under this fund.

In the first part of 2020, the focus was on monitoring the 40 projects that were validated, approved and fully implemented under the 2019 Community Investment Program. These projects include the construction of a library at Bagassi high school, livestock breeding and food manufacturing, and the repair of local dam irrigation canals.



Bagassi Town Hall proposed and validated projects to the value of US\$2 million

# US\$3.2m

Roxgold has donated US\$3.2m to the Bagassi municipality community program to date Spent on Covid prevention and response in 2020 at Yaramoko site in Bagassi region

In the second half of 2020, Roxgold's efforts within the Community Investment Program were focused on assisting local authorities and communities in operationalizing the LDMF to ensure the continuity of programs and activities. This entailed delivering a workshop with the local technical services and communities in order to facilitate their contribution in identifying and structuring projects for local development. 83 people participated in the workshop, including the former Minister of Infrastructure, the Assembly Deputy and the General Manager for Potable Water, to discuss how the fund will be distributed, the conditions of use of the fund and the main eligible projects.

In December, the Bagassi Town Hall proposed and validated 21 projects with a cost of approximately US\$2 million to the regional budget validation committee.

Roxgold's proactive engagement with the appropriate stakeholders at the appropriate time ensured continuity of the many positive social impacts that the Community Investment Program delivers.

#### **Environmental Stewardship**

Roxgold works to not only mitigate the impacts of mining on the natural environment but to ensure that its long-term presence is beneficial with the aim of leaving things better than they were found. Roxgold, guided by its environmental policy, continually monitors environmental conditions in the areas near its operations to evaluate the impacts of the Company's activities and define strategies and plans to address them.

Roxgold applies best practices to prevent pollution and manage waste based on the principles of reuse, reduction, recycling and elimination.

All of Roxgold's steps are taken with the knowledge that the mine will close one day; that consideration also informs the Company's environmental planning and objectives.

The Company's environmental efforts and commitments fall within the Environmental and Social Management System (ESMS) and are detailed in an Environmental Management Program (EMP) that is developed every year based on the project requirements, risk assessments and past performance to ensure the continuous improvement of its activities.



540 environmental monitoring activities took place in 2020

Roxgold improved its ESMS in 2020 by aligning to ISO 14001:2015 requirements in areas including environmental policy, stakeholder engagement, environmental training and awareness, and communications planning and procedures.

Internal audits included two internal contractor audits and 167 environmental workplace inspections, along with five external audits by the Ministry of Mining, Ministry of Environment and the National Laboratory for Public Health. 540 environmental monitoring activities took place in 2020, including those related to water, dust, gas, noise and vibration.

The mine closure plan was updated in 2020 to reflect project developments, as is done annually.

#### **Biodiversity**

Roxgold recognizes that activities related to mining could potentially disrupt the delicate ecological balance of local flora and fauna, so the EMP includes strategies to mitigate and compensate for any losses that might occur as a result of the Company's operations, using the fenced mine site as an opportunity to enhance biodiversity. Roxgold's biodiversity management program aims to develop an integrated management approach that includes reducing impacts of mining activities on biodiversity, conservation and promotion of fauna and flora, and progressive rehabilitation of any disrupted land.

The program also includes engagement with the local community as well as technical services to create collaborative opportunities that help protect the environment in the vicinity of the mine site.

The following activities were implemented as part of the 2020 biodiversity management program:

#### REFORESTATION

12,828 trees were donated to local associations and villages surrounding the mine site for planting during the year against the goal of 10,000 tree plantings as part of the 2020 reforestation campaign. Two protected lands for the Koussaro school were created, including one forested green space, one market garden and one pilot tangelo farm.

#### CAPACITY-BUILDING PROGRAM

The capacity-building program for local stakeholders for local environmental protection continued on a limited basis during the year: training on shea and other local tree planting, as well as grafting, for local nurserymen took place. A specialist from the National Center for Forestry Seeds conducted the training, and equipment was also donated to nurserymen in order to improve their capabilities for tree production. These actions are part of Roxgold's assistance to the local community to increase availability of trees at affordable prices.



Local nursery part of the capacity building program

#### SPECIES RE-INTRODUCTION

The development of the conservation zone inside the mine site was marked by the reintroduction of dorcas gazelle (Gazella dorcas or ariel gazelle). The gazelles are in addition to the duikers, monkeys and giant turtles previously introduced. Beekeeping and activities to protect the conservation zone from bushfires also continued.

#### FAUNA AND FLORA SURVEY

An annual fauna survey was carried out to assess the evolution of biodiversity in the permitted region of the mine.

The survey collected up-to-date information in order to evaluate the performance of the biodiversity management program and included an informal inventory of the mammalian and ornithological fauna.

#### **Tailings management**

Tailings Storage Facility (TSF) water quality is monitored according to recommendations by the International Cyanide Management Code (ICMC) that are followed as a voluntary standard. Tailings water is sampled every week and tested for Weak Acid Dissociable (WAD) cyanide and free cyanide in the thickener, the process water and the decant water (return water pumped from the TSF). The WAD cyanide levels recorded remain well below the 50 parts per million (ppm) recommended by the ICMC.

The TSF is lined with a protective high-density polyethylene membrane to ensure complete containment of tailings. Cyanide control also includes sampling water from the Water Storage Dam (WSD), given the proximity of the two facilities (TSF and WSD). All results proved to be below the limit of detection (0.5 ppm). In addition, Roxgold monitored the quality of the water collected by the TSF underdrainage system in order to track any leakage of tailing water through the TSF liner. Free cyanide, WAD cyanide and total cyanide levels were measured monthly. Finally, Roxgold commissions a specialized consultant to carry out regular and ongoing independent audits of the TSF annually during operations to ensure that its design, construction and operation are in line with industry best practices.



Roxgold worker monitoring the water quality

#### Water stewardship

Water is a highly valuable resource in the region, so water stewardship is especially important. The Yaramoko process plant is designed to ensure zero discharge into the environment and 55% of the water consumption by the process plant is from recycled water from the tailings facility. The freshwater withdrawal intensity (cubic meters (m<sup>3</sup>) withdrawn per tonne of processed ore) was 0.43 m<sup>3</sup>/t in 2020 due to the recycling of water from the tailings facility. The current water monitoring network includes 44 monitoring points, both inside and outside the mining area. Analysis is conducted onsite and in laboratories in Ouagadougou. Results are compared against the applicable national and international standards such as the IFC, WHO and ICMC when appropriate.

To ensure that mining activities are not impacting water levels, flow meters have been installed at the camp's supply boreholes (the only points of drinking water), and quantities are measured by counting the number of tanks filled in other areas. The Company provides a report on its water consumption to the Mouhoun Water Agency on a quarterly basis as requested by Burkina Faso regulation.

#### Materials and waste management

Roxgold has a waste management plan that has been in effect since 2014, which includes monitoring the amount and type of waste that is generated. Non-hazardous waste such as paper and cardboard, plastic, wood and metal from camp construction and maintenance, food and tires make up more than 90% of waste collected. Hazardous waste represents less than 10% of the waste collected, including waste oil and grease, used batteries and lights.

Recent activities from the waste management plan include water reuse, waste bin color coding and the ongoing collaboration with local recyclers.



Part of Roxgold's monitoring team

#### Air

Roxgold continues to record the air quality using dust collection and analysis methods that are consistent with the American standard ASTM D 17-39-98. Records from 2020 compared to those of the previous years indicated that dust deposit levels were comparable or decreased in 2020 and were also under the applicable standards. Based on these results, it can be concluded that mine activities have no significant effect on the ambient air quality of the surrounding communities.

## Energy consumption and greenhouse gas (GHG) emissions

Since January 2020, a new version of the carbon footprint method (Bilan Carbone<sup>™</sup>) developed by the French Environment and Energy Management Agency (ADEME) has been used to evaluate the Company's carbon footprint by considering both direct and indirect emissions.

### HARTE GOLD gold, canada

# Harte Gold Corp. ('Harte Gold') is a gold producer and explorer with its principal asset located in Ontario, Canada.

Harte successfully pursued a dual track project development and exploration strategy at the Sugar Zone project, delivering a tripling of mineral resources to 1.7 m ounces and first production within two years of Appian's maiden investment into the company in December 2016. Commercial production was declared in January 2019. Harte controls a 79,000 Ha land package along the highly prospective and under-explored Abitibi Greenstone Belt with several near-mine and regional exploration targets identified.



Harte Gold processing plant

Gold's facilities



#### **Health & Safety**

Harte Gold focuses on operational improvements, advancement of engineering practices and continuous improvement to lower the risks associated with on-going projects while ensuring the health and safety of all stakeholders and adherence to all applicable regulations.

To achieve a Zero Harm vision, and to maintain a safe and healthy work environment for employees, management has worked diligently alongside the workforce to build safety systems and promote a safety culture on site. This culture supports and creates safe behaviors and practices that become a natural part of daily tasks, both at work and home.

#### **Social Responsibility**

Harte Gold is committed to respecting the natural environment, maintaining strong community partnerships, and putting the health and safety of its employees first. Zero Harm is both a goal and a journey.

People are the core of Harte's ESG success. The values and guiding principles of safety are the #1 priority, as are family, honesty, integrity, hard work, respect, and encouraging new ideas and creativity

Working proactively with all the mine's neighbors is very important in ensuring that the development of the mine is a win-win venture for all stakeholders. Harte Gold works with several neighboring communities to foster direct and indirect employment and training opportunities, as well as to identify and generate business opportunities and economic spin-offs. Harte Gold also has an IIBA agreement with the local Pic Mobert First Nation community.

Harte Gold Stakeholder engagement is important to executing the multi-year growth plan while maintaining the highest standards of environmental, social and governance performance.



Pic Mobert First Nation's White Lake Limited Partnership provides direct and indirect employment at Harte Gold's Sugar Zone Mine

#### **Environmental Stewardship**

Fostering a culture of environmental responsibility and stewardship is important for protecting the natural environment, and Harte Gold is committed to operating their facility within federal and provincial regulations, and fulfilling their commitments to First Nations.

Harte Gold is set amongst the Algoma district in Northwestern Ontario, surrounded by the boreal forest, with an abundance of freshwater lakes and rivers. The Algoma district is known for its rugged beauty, provincial parks, wildlife, fishing and hunting experiences.

Common wildlife around the Harte Gold site include moose, black bears, fox, lynx, wolves, and birds of prey



#### **Environmental Goals at Harte Gold**

- To foster a culture of environmental responsibility and stewardship
- Minimize negative environmental impacts at the Sugar Zone mine and surrounding exploration zones
- Achieve zero incidents of non-compliance
- Continually improve environmental performance

To ensure environmental goals are achieved, Harte Gold's Environmental Department provides a variety of training and awareness programs to educate employees about the importance of environmental stewardship and foster a meaningful environmental culture at site. Harte Gold maintains a positive relationship with Ministry personnel and ensure all steps are taken to remain in compliance with government regulations.

Harte Gold is committed to respecting the natural environment, maintaining strong community partnerships, and putting the health and safety of employees first. Zero Harm is both a goal and a journey.

## PEAK RESOURCES RARE EARTHS, TANZANIA

The Ngualla Rare Earth Project ('Ngualla') in Tanzania is a high-grade and long-life rare earth oxide ('REO') deposit with unique weathered bastnaesite mineralogy and an attractive basket of magnet-related light rare earth minerals.

Appian, alongside the IFC, invested to advance the company through the finalization of pilot plant test work and a definitive feasibility study outlining the low cost and strategic potential of Ngualla and downstream REO refinery in Teesside UK.



Drill rig on site

Trench sampling



#### **Health & Safety**

Peak has managed to maintain an exemplary health and safety record with no LTIs incurred within the past three years. A positive safety and reporting culture has been instilled amongst local employees and contractors on site.



Peak local team

#### **Social Responsibility**

Peak has funded, assisted with, and donated to many community projects in the local area close to the mine. Projects were identified by the Ngualla Village Council based on the needs and priorities of their constituents. These projects are then brought to Peak's attention at village meetings and developed through further discussion and consultation that includes the broader levels of local administration to ensure they are aligned with the established programs of the district government.



Introductory meeting with new Songwe regional head

To date, Peak has funded, assisted with, or donated to, the following projects in the Ngualla Village, Ward and surrounding areas:

- School Development Program (construction of two new classrooms; refurbishment of five existing classrooms; construction and donation of new school desks; donation of beds and mattresses; donation of textbooks, stationery and sports equipment)
- Construction of two duplex houses at Ngualla Primary School (accommodation for four teachers and their families).
- Construction of one duplex house at Itiziro Village Primary School and one duplex house at Magereza Primary School

- Donation of new football kits and equipment
- Annual sponsorship of the Nane Nane (farmers market) local football tournament
- Donations and assistance for official visits including delegate transport
- Emergency medical transport
- Village water supply maintenance
- Road maintenance
- Repairs to a maternity ward and donation of a maternity bed, new mattresses, bed sheets and blankets at Ngwala Village Medical Dispensary
- Assistance with airstrip preparation, maintenance and payment of the license fees

In all of its community development projects, Peak utilizes the knowledge and skills of local craftsmen and laborers and where possible sources materials from local suppliers and businesses.



Itiziro classrooms

#### **Environmental Stewardship**

The Environmental Certificate was granted in March 2017 which represented a major step in the permitting process that included extensive environmental, flora/fauna surveys and community consultations. A full time Community Liaison Officer is based at the Ngualla Camp and runs the Stakeholder Engagement Plan process.



Chunya DC inaugurating new village water pump

### KALBAR OPERATIONS zircon-rutile-ilmenite-rare earths, australia

# Kalbar Operations Pty Ltd ('Kalbar') is a mineral sands development company with its principal asset located in Victoria, Australia.

Kalbar owns 100% of the zircon rich Fingerboards Mineral Sand Project ('Fingerboards Project') which is an advanced stage, high grade mineral sands project containing zircon, rutile, ilmenite and rare earths. These minerals have a broad range of uses including in ceramics, tiles, pigment coatings, catalytic converters, water purification, specialist foundry alloys, electric vehicles permanent magnets and wind turbines.

The deposit was discovered in 2004 by Rio Tinto and has the potential to be a high margin operation. It is currently ranked by the leading industry consultant as the best zircon project on an inducement pricing basis, driven by the zircon rich mineral assemblage. Appian is partnering with an experienced management team and shareholders who have an excellent track record of asset development in the mineral sands sector.

Kalbar's seed production nursery in Bengworden, Bairnsdale

The start Man and a start and a



#### **Educational & Employment**

#### **Mining Skills Organisation Pilot**

The Australian mining industry has seen a rise to the highest level in seven years of the commencement in apprenticeships and trainees. Despite the COVID-19 pandemic, the 2020 calendar year was one of the strongest on record for commencements in mining-related trade.

It is projected that more than 1,000 apprenticeships will be created by the mining industry in partnership with the Australian Government through the Mining Skills Organisation Pilot, an initiative the Minerals Council Australia is proud to support.

Kalbar representation has assisted in the Pilot program for the Mining Skills Organisation Pilot course. This course has been developed by industry across Victoria to encompass the requirements for both above and underground mining.

A strong focus has been to enable the in-class training to be conducted locally and utilise TAFE (a system of tertiary education offering courses mainly in technical and vocational subjects -Technical and Further Education) to assist using their local branches. Our ongoing relationships with the local education providers, Registered Training Organisations and schools continues to strengthen as we offer project updates and site tours to interested parties.

#### Teacher Earth Science Education Program (TESEP)

The TESEP program has allowed Kalbar to engage with a different cohort of the community and provide the opportunity to open discussions with schools and pathways into the Mining industry.

Established in 2008 to assist development of science teachers, the TESEP program consists of nine professional development modules as well as online resources and minerals kits. Kalbar Operations funded the mineral kits in readiness for course delivery at a few of the Gippsland schools. The program is endorsed by the Australian Science Teachers Association and has proven popular within other school areas.

# 90m

4.9bn

The Project will generate approx A\$190m of capital expenditure

The project will generate operating costs of A\$2.4bn

The Project will generate revenues of approx A\$4.9bn

ODS

The project will create 200 direct iobs in the area

#### **Environment Effects Statement**

The 40-business day public exhibition of the Fingerboards Mineral Sands Project Environment Effects Statement (EES) concluded on 29 October 2020.

Commencing on Monday 3 May 2021, the Independent Advisory Committee Panel Hearing was conducted with an online format reflecting the impacts of the COVID-19 restrictions.

An in-person hearing was held in Bairnsdale from 28 June 2021 to 16 July 2021.

The Panel Hearing was completed on Thursday 22 July 2021 with the IAC now preparing their assessment for the Minister for Planning which will be submitted within 40 business days from the close of proceedings (late September 2021)

The Minister for Planning's assessment is expected towards the end of 2021.

#### Community

#### **East Gippsland Field Days**

The Kalbar Team was kept very busy during the East Gippsland Field Days held on 23-24 April at the Bairnsdale aerodrome. The team had a steady stream of visitors to their exhibit during both days and engaged with the many interested members of the community.

The Kalbar exhibit provided community members with an opportunity to further understand the mining process, see first-hand how rehabilitation of the site will be undertaken, experience some of the equipment that will be used on site, and some of the products that the mineral sands will be used to produce (including face paint).



The Kalbar Team during the East Gippsland Field Days

#### **Community Grants Program**

Kalbar's Community Grant Program was met with keen interest during the first half of the year. A wide and varied group of submissions was received from Sporting Groups to local Kindergartens and Community Halls.

Kalbar assisted nine local groups with funding various projects to the value of A\$2000 per project. Of particular interest were the groups listed below.

- Lindenow Memorial Hall Purchase new crockery and cutlery.
- Lindenow South Football Netball Club Provide funding for the first Senior women's football team and Indigenous football to acquire players jumpers.
- East Gippsland Rail Trail Purchase of tables and seats along the trail. Plaques were fitted to the benches identifying that they were funded by Kalbar.

# KALBAR OPERATIONS

- Westdale Kindergarten Funding assisted in upgrading an unused part of the yard into a vibrant space.
- Bairnsdale Football Netball Club Replace netball uniforms across 6 grades of netball from U13 through to A Grade, equating to approximately 60 players.
- Orbost Football Netball Club Replace the goal posts on the netball court to allow training at the junior level.
- George Gray Centre A long standing and highly regarded Disability Day Service for Adults over the age of 18, George Gray used the funding towards the purchase of the Obie interactive gaming console. The Obie is a highly advanced interactive gaming console that projects custom-made games onto any surfaces – tabletops, floors, and walls. The system encourages active movement through touching, moving, and hand-eye coordination skills on the displayed images. Throughout COVID lockdowns this piece of equipment has provided so much joy for disabled and vulnerable people.



The Obie in action at the George Gray Centre

Wendy McLaren, Senior Staff Member: "We have received the Obie and have been putting it into good use during the lockdown. The photos tell the story better than I can, but I thought I would share with you a video of participants using the system and to take the opportunity to thank the team at Kalbar again for supporting our purchase."

 Sale Tennis Club – The ANZ Hotshots program for kids had such keen interest that the Sale tennis club saw the need to purchase a Spinfire Pro 2 Tennis Ball Machine. Support from local primary schools and other Tennis Clubs from all over East Gippsland has increased numbers significantly over the past 2 years.

Robin Lowe, President Sale Tennis Club: "The ball machine that is the subject of this grant will see our Hot Shots kids become the first group of Hot Shots children in Victoria to work with this state-of-the-art technology, keeping them engaged, accelerate their tennis learning and allow us to increase our participation numbers." • Wy Yung Angling Club - Operating from dual purpose club rooms, the Wy Yung Angling Club used the funding to purchase a defibrillator. The Club rooms are also used by netball players and umpires during football season and cricket players during summer providing exposure to an essential piece of equipment to a larger part of the community.

Leigh Searle, Kalbar Operations OH & S Specialist will run a training event for the Wy Yung Clubs once COVID restrictions allow.



Kalbar hosting the first Community Grants Program

#### Sponsorship of 2021 Victorian Women in Mining Awards

Kalbar was a proud major sponsor of the 2021 Victorian Women in Mining Awards and four Award winners were announced on 7 July 2021.

An award ceremony event was held online, attended by the Minister for Resources, Jaclyn Symes. Kalbar congratulated the winners and acknowledged the exceptional achievement that women make to the mining industry.

Mining is an industry which has been male dominant, regardless of geographical location. There have been positive steps which have helped to integrate women into the mining industry, however women continue to be under-represented.

Change is sweeping the industry, with an increasing number of women donning hi-vis and hard hats to operate across all levels in the industry. While the number of women participating in the resources sector has improved in past decades, there is still a way to go to lift female participation in the industry.

In recruiting, Kalbar is planning to work with local industry stakeholders and training providers to attract local people to be part of its mineral sands mining operation. The training program will focus on upskilling people to provide employment, traineeship, and apprenticeship opportunities for women, also including an indigenous component.

The winners of the Victorian Women in Mining Awards will progress to the national awards to be held in September 2021.

#### Health & Safety

Kalbar is committed to creating a strong health and safety culture based on visible leadership, consultation, and engagement, where everybody accepts accountability for their personal safety and the safety of others.

Kalbar's key objective is for everybody to return home safe and healthy every day.

In September 2020, Kalbar's team was expanded with the appointment of an Occupational Health & Safety Systems Specialist. A key focus of this role is to expand and develop Kalbar's existing Health & Safety Management System and to provide health & safety advice and support to all areas of the business.

Priorities for the year included the development and implementation of:

- · Hazard identification & risk management tools
- Incident reporting & investigation tools
- · Fitness for work procedures, and
- Health & wellbeing initiatives

To support the health and wellbeing of employees and their family members, Kalbar has introduced an Employee Assistance Program (EAP).

The EAP is a free and confidential 24/7 service facilitated by an external provider and is accessed via telephone, face-to-face and video consultations. In addition to mental health counselling services, the EAP provides advice for a range of topics including nutrition, sleep, resilience, mindfulness, conflict resolution and addictive behaviors management.

In response to the ongoing COVID-19 pandemic, Kalbar's COVIDSafe plan is regularly updated in line with government health advice and restrictions. Kalbar is committed to minimising the risk of infection to employees and the local community and has adapted and restricted work processes where required.

Kalbar's commitment to health & safety will be further enhanced next year with the introduction of a cloud-based Health Safety Environment Community (HSEC) software solution, an updated health & safety induction, the development of performance standards, and a focus on principal hazard protocols and critical control management.

#### Environmental

#### **Pastoral Company**

Kalbar established a pastoral company called *The Fingerboards Pastoral Pty Ltd* to manage the land within and adjacent to the project area.

The available farming land has made an agricultural enterprise possible, and grazing is a viable means of maintaining the land. We are investing in agriculture in the East Gippsland region to showcase how mining, farming, land management and nature conservation can co-exist and provide multiple benefits for the local community.

Fingerboards Pastoral will run as a commercial farming operation. Initially, it will be focussed as a livestock operation running sheep and beef cattle within and adjacent to the Fingerboards project area. In time, Kalbar will look towards developing cropping and mixed farming and we expect it to be self-sufficient within a few years. An experienced farm manager from the local area will manage Fingerboards Pastoral.

The broader vision of Fingerboards Pastoral is to look at opportunities for young people, to work on the farm under a skills development, work experience-type program, with the potential to continue to further education or employment opportunities.

#### **Environmental Stewardship**

Kalbar is committed to providing responsible stewardship of the natural resources over which we have control or influence. Kalbar recognises that best-in-class environmental management is critical to excellent operational performance and to building community trust and acceptance.

Over the preceding twelve months, Kalbar has been working towards gaining environmental approvals for the project – with the completion of the Independent Advisory Committee (IAC) panel inquiry in July 2021. The panel inquiry saw various expert witnesses provide additional information to support the Environmental Effects Statement (EES) and provide the panel hearing with assurances across all facets of the project. Throughout the process, Kalbar has identified potential risks and having done so has proposed an extensive suite of mitigation measures aimed at identifying, monitoring, and managing impacts of the Project on the area, its environment, and its inhabitants.

Importantly, Kalbar has developed and endorsed a new Environmental Policy which details our commitment to manage environmental threats and impacts associated with specific activities or tasks, and to identify opportunities that have the potential to drive value creation for both the Company and the communities in which it operates. As Kalbar progresses towards an operational mine it will continue to develop systems and plans that consider and manage noise and air emissions, waste management, land preservation and rehabilitation, ecological conservation and resource efficiency and use. Kalbar will look to adopt technologies to help it reach these goals.

Priorities for the year included:

#### Approvals

 Concluding the Public Hearing for the Fingerboards Mineral Sands Project Inquiry and Advisory Committee which will submit its report to the Minister for Planning for his advice on the EES and Planning Scheme Amendment (PSA)

#### **Resource Use: Water and Energy**

- Kalbar has formalised its commitment to reducing greenhouse gas emissions and has released a carbon emissions position statement. This details Kalbar's commitment to reduce net scope 1 and 2 greenhouse gas emissions from the Fingerboards Mineral Sands Project ('Project') to achieve a reduction in net greenhouse gas emissions of 26-28% below the Project baseline levels by 2030. This is in line with Australian government policy, with subsequent emission targets to be set in line with Australian government policy at the time.
- Ongoing site monitoring and baselining conditions

# KALBAR OPERATIONS

 Introducing centrifuges to dewater tailings, thus eliminating the need for a tailing storage facility (TSF), and increasing water recovery

#### **Rehabilitation & Native Vegetation**

- Ongoing Nursery development, seed production and plant
  establishment
- Further site assessments to establish offsets and identifying areas to avoid impact to native vegetation
- Development of a Fauna Impact Mitigation and Landscape Plan

#### **Cultural Heritage**

• Continuing to engage with GLAWAC and our cultural heritage advisor to progress the development and approval of the Cultural Heritage Management Plan (CHMP)



#### IAC visit to Kalbar's Seed Production Nursery

On Wednesday 14 July 2021 the IAC, together with representatives from Kalbar visited Kalbar's seed production nursery.

Kalbar's Manager of Ecological Restoration, Dr Paul Gibson-Roy, hosted the visit together with staff and provided an overview of the history of the site, why and how the facility was developed, and how it will be critical to developing the seed resources required for restoration of the Fingerboards mining operations in future. Skillinvest trainee Isaac Hoskins was also on hand and gave a brief account of the work he has undertaken during his traineeship at the nursery.



Kalbar's Seed Production Nursery Wildflower Conservation area

The visitors toured the crop beds and viewed more than 100 species being prepared or growing as native seed crops and gained an insight into the processes involved in developing crops from wild seed, propagating and developing seeds to maturity, and maintaining them to producing ongoing seed harvests. Also showcased was a pasture seeding trial which has been developed to explore the suitability of different pasture species, which at that time, demonstrated very good plant cover across plots.

Tour participants also saw the nursery's newly commissioned temperature and humidity-controlled seed cool room. This facility will be vital to storing seed under appropriate conditions to preserve its viability until use in mine rehabilitation.

The tour provided the IAC and accompanying visitors with an opportunity to see first-hand the large amount of work undertaken during the past 2 ½ years to develop native seed resources required to meet restoration goals for the Fingerboards project. It was also an opportunity to learn how Kalbar's seed production efforts could provide valuable seed resources for the wider community – local government authorities, Landcare, GLAWAC, catchment management authorities for the wider community.

#### **Atlantic Nickel**

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