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# Appian Annual Sustainability Report

## September 2020



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



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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.



#### Technical

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

#### Qualitative

1. Management ratings
2. Country
3. Minerals and surface rights / title
4. Permitting process
5. Environment and social impact
6. Health and safety

#### Financial

1. Entry valuation
2. Deal structure
3. Commodity fundamentals
4. Returns – Multiple of money
5. Financeability
6. Ability to exit
7. M&A
8. IPO (equity story)

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 June 2019 to June 2020.

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

# 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

## Positive impact on local economies

- Appian's portfolio companies have created 4,560 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, Avanco and Peak employees are local residents
- Atlantic Nickel, MVV, Harte, Avanco and Roxgold 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 sent its safety expert to work alongside management in implementing best-in-class procedures across portfolio
- Avanco resources demonstrated industry-leading safety performance with zero LTIs in nearly three years of construction and production

## 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



# CEO MESSAGE



*“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.”*

The last twelve months have been seminal in the life of Appian, with expansions into North America and Australia, taking our global presence across five continents and our total AUM to over \$1bn, along with our 6th mine out of eight brought into production. Alongside fundraising, portfolio management and seeking out new investments, a great deal of time was spent focusing on the process and compliance frameworks internally and the team on making them better leaders and managers and ultimately better decision makers.

We at Appian respect greatly that ESG is an increasingly core theme for many LPs. We are seeing green/clean energy enter the third and final phase of its adoption phase, which is disruption. When it is now cheaper to install green energy than to maintain existing fossil fuel driven energy output, rapid adoption follows. In Portugal, for example, we have seen solar PV cells installed for a record US\$.016c/kWh, which is 10x cheaper than the fossil fuel cost range!

Mining is part of the solution, rather than part of the problem. If done correctly, mining has an ability to positively impact communities in a more direct manner than nearly any other sector, which means that the industry has the ability to assist the local communities and assist the world with the clean energy revolution currently underway.

COVID-19 has accelerated many of the trends the world was already on, including technology adoption, de-carbonization, de-urbanization and the move to community from individualism. I am pleased to say that COVID-19 has not significantly impacted our operations, as mining, as the first piece in the industrial production chain, was deemed an essential business and therefore saw limited shut-downs. I am proud of the actions taken by our portfolio company CEOs to keep their employees and communities safe and proud that the Appian Way Charitable Foundation stepped in to support local communities and hospitals around some of our operations when government support was non-existent.

In April 2020, in view of the COVID-19 situation, the Appian Way Charitable Foundation (AWCF) Trustees approved a number of relief measures at MVV and Atlantic Nickel in order to improve access to hygiene products and equipment within the local communities.

These measures include supporting local manufacturers in the production of masks which have been distributed free of charge to local communities as well as the procurement and distribution of COVID-19 tests, surgical masks, protection masks and infrared thermometers to the municipalities.

More than 40 tons of health protection, cleaning materials and hygiene items with a value in excess of R\$3m have been donated so far to the local communities in both Bahia and Alagoas. Around 37,000 people have directly benefited from these initiatives.

AWCF is working closely with the Appian portfolio companies to adapt some of the existing social investment programs to address the changing social needs during the COVID-19 crisis.

Social engagement and transparency are key. On the local level, every stage of a mining operation needs to engage with local communities to promote and foster a life cycle understanding of how it can contribute to their development and well-being. If we don't start to discuss social engagement and create meaningful solution-based dialogue with all constituents, mining will forever be tarnished with the same brush.

Strategic Environmental Assessments are done relatively quickly and are thus unable to probe with the depth and nuance that would be possible through more extended analytical work. Critical policy decisions about mining and climate are being made in an evidence, data and analysis-poor environment. At some point, failing to engage with an issue becomes part of the issue itself.

At Appian, we understand that it is crucial to consider national development plans and to apply environmental criteria in our investment and business decision-making and to manage the impacts of potential resettlement as well as of mine closure. Tracking and reviewing performance on biodiversity management is also key.

Our overall vision is to provide our investors with the opportunity to take advantage of macro investment stories by going further upstream into the mining space but with lower risks and to be life-cycle custodians for the materials we extract.

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

**Michael W. Scherb**  
Founder & CEO

## 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.

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

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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.

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### **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**

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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. two for geology core re-boxing and four for a LT drilling contract).

We use off-cycle unannounced audits for our contracts and have a third party firm, Control Risks, supply a due diligence team which analyses the core contracts awarded in the previous twelve months. The Appian Board signs off on contracts over US\$1m as well as on any variance of 10% for any approved budget item and for a 5% variance in the overall budget.

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

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 4,560 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
- Mining industry is non-traditional as it struggles to attract female candidates into the talent pool. Only 5.6% of the mining engineering class of Queen's University's Engineering program of 2019 were women
- Appian is addressing this gender imbalance by encouraging its portfolio companies to be equal opportunity companies. At Atlantic Nickel, ~14% 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, 21% of all employees are women.



In August 2020, Appian announced the appointment of Nelson Silva (left) as its Senior Safety and Social Performance Advisor ('SSSPA'). In his role as SSSPA, Nelson will assess and advise Appian and its portfolio companies on safety, environmental and community matters to ensure

Tier 1 standards are established and maintained across the business. He will work closely with management teams of the firm's operated assets while also advising businesses in which the Company holds a significant minority interest.

Nelson will also assist the Company with its broader stakeholder initiatives and due diligence on future acquisitions from an environmental, health, safety and community perspective, to ensure that Appian's strong record and operational excellence is maintained. Additionally, he has been appointed as a trustee of the AWCF where he will play a central role in its strategy and operations.

Nelson has spent over 40 years in the natural resources sector, holding leadership roles with major international companies particularly focused on Brazil, coupled with strong environmental, health, safety and community relations experience. Most recently he was Chief Strategy and Performance Officer and member of the Executive Team of Petrobras, and previously CEO of BG Group in South America. He was also President of the Aluminium business and Director of Carbon Steel Materials at BHP Billiton, and prior to

that Marketing and Sales Director at Vale. Nelson is also an independent board member of Compass Group Plc (UK), where he is Chairman of the Corporate Responsibility Committee, Nutrien Ltd (Canada), Altera Infrastructure (Norway) and Cosan Ltd (Brazil).

He is a Brazilian citizen, is a graduate of the University of São Paulo and holds a masters degree from Fundação Getúlio Vargas.

Michael W. Scherb commented:

*"I am very pleased to announce Nelson's appointment as Appian's Senior Safety and Social Performance Advisor, where he will lead our environmental, health, safety and community initiatives across our portfolio. This reaffirms our commitment to best-in-class HSE practices. His significant experience with some of the world's leading companies will be a real asset to our business, further strengthening our robust policies and procedures. Nelson's appointment comes at a very exciting time for Appian, and he will play a crucial role as we enter our next phase of growth."*

Nelson Silva commented:

*"This is a very exciting time to be joining Appian and I am delighted to be part of such an innovative and entrepreneurial firm that places environmental, health, safety and community initiatives at the heart of its business culture. I look forward to working with the business and its portfolio companies, building on the strong foundations already in place, as it continues to be the partner of choice in the metals and mining sector."*

# 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 and MVV of US\$1.7m, 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 will be dedicated to sponsor a STEAM teacher training initiative.

## US\$1.7m

The AWCF Trustees approved a social and community budget for Atlantic Nickel and MVV of US\$1.7m



Local children in Bahia State near Appian portfolio company Atlantic Nickel



At the beginning of the COVID-19 crisis, the AWCF pivoted and reacted quickly to work with our Brazilian focused portfolio companies to support local communities where the government did not. So far, more than 50 tons of materials in excess of US\$350k benefiting more than 37,000 people in Alagoas and Bahia have been donated.

The AWCF has identified Educando, a well-established NGO specializing in STEAM education, and UNEAL, the State University of Alagoas, as partners to deliver a teacher training program.

An 18-month pilot program is being developed which will be rolled out to five schools in Craibas (Alagoas), the region where MVV is located, to begin with, with the prospect of expanding the program to additional schools in the region. At a later stage, it is planned to roll out the program with Educando and a regional partner in Bahia.

The number of direct beneficiaries of the pilot project is 330 students. It is projected that approximately 120 teachers in Alagoas and around 35 teachers in Bahia will benefit from the full training programme. The estimated total number of impacted students will be around 8,000.

**155** teachers  
120 teachers in Alagoas and around 35 teachers in Bahia will benefit from the full teacher training programme

**8,000** students  
The estimated total number of impacted students of the project will be around 8,000



Local school teams visit MVV's Environmental Education Center

Five participating schools have now been selected for the initial pilot program. An agreement with Educando and UNEAL as coordinator and operator of the project has been reached and a successful all-party meeting took place which resulted in the definition of implementation milestones and KPIs.

The evolving COVID-19 situation in Brazil which is directly impacting on the dates when schools will reopen has created some uncertainty around the overall project timeline. Activities that can be performed remotely are being prioritized, including development of training materials and new STEAM activities.

In late 2019, the Trustees approved a grant to Golang Education Outreach, an education charity working with underprivileged children in Honeydew, South Africa. The charity was formed in 2002 to reach out to the needy by furthering the educational support of a number of children living in the Zandspruit Informal Settlement, operating as a community outreach with a vision to uplift and enhance the educational journeys of underprivileged and vulnerable children.



Golang Primary School healthy planting and eating project

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



# 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. Benefiting from existing permits and infrastructure, Appian and Atlantic Nickel have safely returned the mine into production with the first sale of nickel concentrate consummated in January 2020.



*Nickel concentrate ready to be shipped*



*Atlantic Nickel Santa Rita site*

## Health & Safety

Safety is Atlantic Nickel's main value. The company's objective is to perform all activities safely and responsibly. A revised strategy and approach to safety has been rolled out since 2018, showing significant improvements since Appian acquired the mine.

**Atlantic Nickel also achieved almost 3,000,000 hours without lost time incidents ('LTIs') between July 2017 and April 2020**

Atlantic Nickel implemented the Visible Felt Leadership Programme ('VFL') and managed to identify all critical risks and put into place appropriate control actions. To this end, Appian Safety Standards have been rolled out fully, including Safety Golden rules, leading and lagging indicators, contractor assessment framework, inspections and safety campaigns. Safety KPIs are now included in 100% performance contracts.

Training forms an integral part of occupational safety. Atlantic Nickel has a training goal rate of 2% per month based on man hours worked. In addition to contributing to safety, training programs need to foster professional development and comply with legal standards. Almost 62,000 training hours were provided from June 2019 to June 2020.



Practical 'Work at Height' training.



Fire safety training

## Social Responsibility

Atlantic Nickel is located in a friendly jurisdiction with strong government support. The mining rights belong to Bahia State and are currently leased to Atlantic Nickel.

In order to support the local communities, Atlantic Nickel is committed to hire as many employees from area where the operation is located. Currently approx. 70% of the workforce comes from the local communities.

Atlantic Nickel has established strong community relations due to the social initiatives that have been put in place. More than US\$3m of services and goods were procured locally between 2018 and 2020 YTD. Between 2018 and 2020, US\$320k were spent on social projects, including COVID-19 initiatives and relief measures.

**US\$3m**

More than US\$3m of services and goods were procured locally between 2018 and 2020 YTD

**US\$320k**

Spent on social projects, such as COVID-19 initiatives and relief measures between 2018 & 2020



Donation of computers to Tapirama Community

Amongst the initiatives that Atlantic Nickel have sponsored in the local towns were:

- An 'athlete training centre' for children
- A digital library where Atlantic Nickel donated computers and furniture
- A teacher training initiative for 180+ participants.
- Donations to CBS, an organisation supporting 103 children in need
- Support for 10 cocoa farmers in the form of free leases and education

**"Safety is Atlantic Nickel's main value. Our objective is to perform all activities safely and responsibly."**





Local mask production

**10 tons**  
Of key items, including PPE, test kits and food baskets for vulnerable families have been donated so far

**US\$316k**  
In excess of US\$316k has been donated so far, with around 15,000 people directly benefiting from these relief measures

In response to the COVID-19 health crises, Atlantic Nickel developed a community response plan to support the local government and municipalities in the region. Atlantic Nickel has been in permanent contact with local Mayors and their key advisors in coordinating local actions against the pandemic. More than 10 tons of key items, including PPE, test kits and food baskets for vulnerable families, with a value in excess of US\$316k have been donated so far, with around 15,000 people directly benefiting from these relief measures.

### Environmental Stewardship

Atlantic Nickel performed an environmental assessment in order to identify any gaps in compliance with IFCs performance standards. The assessment resulted in an Action Plan; the ESAP is monitored weekly by the Executive Committee.

**Key monitoring programmes (water consumption, water quality, dust control, black smoke, residues generated, wildlife protection, fossil fuel consumption and power consumption) have either been fully implemented or are under implementation**

The water management system is undergoing considerable improvements to tackle the sulphate concentration issue and minimise freshwater consumption. No metals contamination or low pH were detected in any sampling. All simulations are performed by external experts (including worst-case scenario simulations) in order to adhere to legislation.

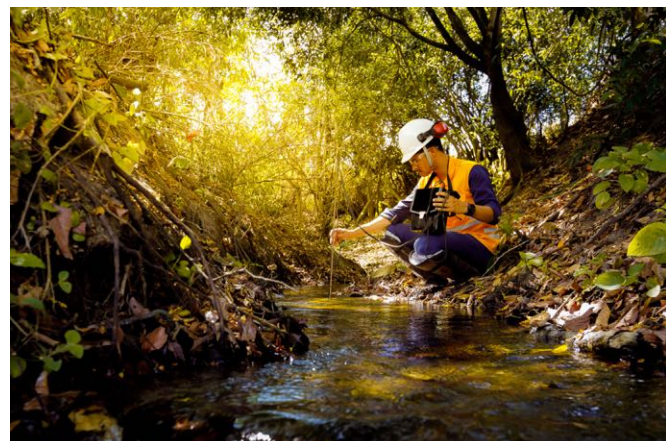
Atlantic Nickel has created a reforestation program and more than 6,500 seedlings were planted in 2019 alone. Starting in 2020, more than 24,000 seedlings will be planted yearly through to 2030.

**6,500**

More than 6,500 seedlings were planted in the reforestation programme in 2019 alone

**24,000**

Starting in 2020, more than 24,000 seedlings will be planted yearly through to 2030



Ongoing environmental monitoring



Seedlings prepared for replanting

**“In response to the COVID-19 health crises, Atlantic Nickel developed a community response plan to support the local government and municipalities in the region. Atlantic Nickel has been in permanent contact with local Mayors and their key advisors in coordinating local actions against the pandemic.”**



# MINERAÇÃO VALE VERDE ("MVV")

COPPER-GOLD, BRAZIL

**The Serrote project is an advanced stage, de-risked greenfield copper-gold development asset currently under construction and benefiting from all major permits in place.**

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.



*Primary crusher pad construction*



*Construction at Mineração Vale Verde*

## Health & Safety

The main objective for MVV where health and safety are concerned is the 'preserving lives' goal. The results obtained to date demonstrate that the company is achieving this object.

All employees, including MVV's own team and all contractors, are trained according to the highest standards that were established by using industry benchmarks with proven effectiveness. All standards fully meet the legal requirements.

The health and safety measures at MVV are designed to enhance a preventive culture focused on safe behaviour. Mandatory training programmes in behavioural dialogue for all staff, including CEOs, are being conducted on a regular basis. The fire brigade staff also has to undergo regular training initiatives.

Throughout the year, 10 campaigns addressing critical risks have been implemented. Safety Golden Rules have been established and training on these rules has been rolled out. In addition, MVV participated in SIPATMIN (Semana Interna de Prevenção de Acidentes no Trabalho na Mineração).

**All the above safety measures and training programs have resulted in a descending 12-month rolling average for LTIFR and NLTIFR, with only one LTI recorded in December 2019**



Community education and consultation



Local school children visit the Serrote greenhouse

## Social Responsibility

MVV works to engage all stakeholders by operating in a transparent manner and by organising events and visits to the company. To further aid transparency, a reliable grievance system has been introduced to enable all its stakeholders access to grievance mechanisms.

**MVV has been positioned by the local authorities as the largest private investment in Alagoas. Taxes on services / municipality tax were reduced by 2% for companies that supply and service MVV in Craíbas**

A successful social dialogue initiative was implemented in April 2019. MVV representatives visit all 14 neighboring communities on a monthly basis. All these efforts and initiatives have resulted in MVV achieving an approval rate of approximately 90%.

**90% approval**

MVV representatives visit all 14 communities on a monthly basis resulting in MVV achieving an approval rate of approx. 90%

**67%**

MVV is the largest private employer in the region. 67% of MVV's workforce come from the local communities

MVV is the largest private employer in the region and the largest investment in the state. 67% of MVV's workforce come from the local communities and another 6% come from other areas in Alagoas. MVV is also committed to creating employment opportunities for women.

MVV has also established a local suppliers' development program. In 2019, 50 local companies participated in tailor-made training courses sponsored by MVV.

In addition, MVV has been providing important support to local municipalities with relief measures during the COVID-19 crisis by improving access to hygiene products and equipment within the local communities. More than 40 tons of health protection and cleaning materials as well as hygiene items have been donated so far and more than US\$35k have been invested to support people mainly from Arapiraca and Craíbas. Around 22,300 people have directly benefited from these MVV initiatives.

**"MVV is the largest private employer in the region. 67% of MVV's workforce come from the local communities and another 6% come from other areas in Alagoas."**





Community members visit the Serrrote project greenhouse.

## Environmental Stewardship

All permits for construction and operational permits for the waterline and power line tie-ins have been granted. The Serrrote Project (then known as the Serrrote da Laje Project) was granted a Preliminary License (‘LP’) in 2008. The first Construction Permit (‘LI’) was issued in 2009 by the Instituto de Meio Ambiente de Alagoas (‘IMA’) and has been renewed bi-annually. MVV submits an annual report to IMA demonstrating its compliance with the environmental regulations stipulated by the Construction Permit.

In 2018/2019, MVV commissioned Manefau Consultoria e Servicos Ambientais to conduct a comprehensive field study of the ecosystem surrounding the mine site, including a vegetation inventory required for the Authorisation for the Suppression of Vegetation.

In the same year, another consultant (SETE Soluções e Tecnologia Ambiental) was hired to update the Environmental Impact Study and Environmental Control Plan based on the updates of the environmental and socioeconomic impact and to also update environmental programs and prepare an Environmental and Social Management System.

**MVV’s environmental stewardship work was acknowledged by UNESCO in 2019 when it officially recognised MVV’s Centre of Environmental Education as an advanced outpost for the Caatinga Biome (an eco region in interior north eastern Brazil characterized by a type of desert vegetation)**



UNESCO Centre for Environmental Education

**“All employees, including MVV’s own team and all contractors, are trained according to the highest standards that were established by using industry benchmarks with proven effectiveness.”**



# 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. Roxgold achieved record annual production in 2019 of 142koz and expects to produce between 120-130koz in 2020.



*Definition drilling at Séguéla, Côte d'Ivoire*



*Roxgold expanded process plant*

## Health & Safety

Roxgold continually works to instill a safety culture and improve performance. All Roxgold personnel and contractors are expected to be leaders in health and safety through safe and responsible behaviour, identification of hazards, and the elimination and control of risks.

Roxgold personnel are equipped to live up to these expectations through ongoing training and communications on relevant topics such as hand safety, hazard identification and risk assessment, lock-out/tag-out procedures, working in confined spaces, fire and hazardous chemical safety, first aid, ergonomics and back care. Roxgold also prioritizes planned workplace inspections and audits to help identify and correct potential hazards – before accidents happen. To assist in this regard, all health and safety personnel completed ISO 45001 lead auditor training in 2019.

From September 2018 to December 2019, Roxgold recorded zero lost time injuries ('LTI') over 3,249,214 hours worked. This result is a strong indicator of Roxgold's company-wide commitment to building a safety leadership culture. Formal work area inspections, including contractor inspections, played a key role in this accomplishment, with 1,080 inspections conducted over the year.



Emergency response training



Health & Safety training

**16,678** hours

Roxgold provided 16,678 hours of training to contractors and employees

**84.7%**

Following intensive local training, 84.7% of employees are from Burkina Faso

Roxgold invests in health programs like the malaria vector control program or the hepatitis B disease campaign. Yaramoko's on-site medical staff organizes departmental meetings every two weeks to discuss health topics with employees. They also go out into the community to provide free medical consultations and patient counselling as part of the Roxgold Community Health Management Plan. In 2019, the hepatitis B voluntary screening and vaccination campaign at Roxgold's Ouagadougou office and the mine site saw 310 vaccines administered.

In 2019, Roxgold provided 16,678 hours of training to contractors and employees. To develop the next generation of miners, Roxgold created a leadership program that focuses on Roxgold's culture of excellence, teamwork and responsibility. In 2019, Roxgold enhanced the Yaramoko technical skills development plan to improve employees' performance and prepare them to take on greater responsibilities.

Roxgold also created a program which saw local people with no prior mining skills or experience participate in intensive 6 to 12-month training on how to run and maintain the Yaramoko process plant. Their efforts paid off, and today 85% of employees are from Burkina Faso, with more than 70% from the closest community and 40% from the immediate mine area.

**US\$138m**

Roxgold Invested US\$138m in local procurement, fostering socio-economic development and engaging with the local stakeholders

**US\$656k**

Roxgold invested US\$656k in community development activities and received the Medal of Honor of Local Communities

## Social Responsibility

In 2019, Roxgold invested US\$138m in local procurement and US\$656k in community development activities and received the Medal of Honor of Local Communities from the highest national authorities in Dédougou, the capital of the Mouhoun Region in Burkina Faso, for its commitment to fostering socio-economic development and engaging with the local stakeholders in a transparent and trustworthy manner.

**Roxgold's community investment program took on 40 unique projects in 2019, with a 100% completion rate by March 2020**

Roxgold employs a highly participative approach with the local communities to decide on which projects will receive company funding. In 2019, 315 consultations with local governments and communities were conducted.

Major projects in 2019 included constructing a library and an administration office at Bagassi high school, refurbishing three classrooms, manufacturing tables and benches for schools, repairing Sipohin dam irrigation canals and bringing electricity to the Mana health centre and Niakongo and Kaho schools. Where possible, local suppliers were hired to work on these projects.

Other funded projects focused on building capacity to sustain traditional livelihoods, for example helping people improve their animal husbandry skills through initiatives such as poultry and goat breeding, and supporting programs for sheep, fish and poultry farming.

While bringing jobs and opportunities to the region, developing the Yaramoko mine and subsequent Bagassi South extension project did result in displacing some people within the mine vicinity.

***"Employing a highly participative approach, Roxgold's local community investment program took on 40 unique projects in 2019, with a 100% completion rate by March 2020."***



Roxgold created two resettlement action plans ('RAPs') to mitigate the impact of these necessary resettlements and to establish dependable, prosperous livelihoods for those affected. The RAPs included monetary compensation as well as support in creating sustainable agricultural opportunities.

In 2019, the Livelihood Restoration Programs introduced new cash crop opportunities, including white maize, yellow maize, cowpea and sorghum. Roxgold also supplied livestock and infrastructure for poultry and pig farming. The programs are supported by training and instruction in sustainable agriculture techniques and monitoring crop yields and viability. Roxgold's goal is to ensure that its neighbors enjoy long-term benefits from the mine.

**Roxgold is strongly committed to advancing the interests of women in its communities. Since 2014, Roxgold's initiatives have helped empower local women to improve their economic standing**

In 2019, Roxgold continued to support women's associations, providing sewing training for young women from Yaro village, helping establish an operation in Boromo for making a West African condiment called soumbala and contributing to the creation of a small-scale processing unit for shea butter.



Support for a local women's association



Opening of the Bagassi Occupational Training Center

Roxgold believes in the importance of education. Roxgold collaborates with the Bagassi Vocational Training Center to offer courses tailored to local needs for youth-based job opportunities outside of mining. In 2019, 30 trainees received a Certificate of Completion for a variety of vocational courses as well as installation kits that would help them establish their own plumbing, vulcanizing or electrical service and repair businesses.



Planting initiatives at Roxgold

**Environmental Stewardship**

Roxgold works to not only mitigate the impact mining has on the natural environment, but to ensure that its long-term impact is beneficial. It continually monitors environmental conditions in the areas near their operations to evaluate the impacts of their activities (in 2019, 198 environmental inspections were conducted) and define strategies and plans to address them. Roxgold applies best practices to prevent pollution and manage waste based on the principles of usage reduction, reutilization, recycling and elimination. Since the Yaramoko mine's inception, no significant adverse environmental impacts or non-compliance incidents were registered.

**As water is a highly valuable resource in the region, water stewardship is especially important**

The Yaramoko process plant is designed to ensure zero discharge into the environment and 40% of the water consumption is from recycled water from the tailings facility. Nearly 40 water-monitoring points inside and outside the mining area are analyzed against national and international standards, including those of the International Cyanide Management Code. Roxgold samples tailings water quality every week and has never exceeded the Cyanide Code limit for wildlife protection. 236,093m<sup>3</sup> of water was recycled and 0m<sup>3</sup> of waste directed to landfills.

In 2019, Roxgold planted more than 15,000 trees in 17 different sites and commissioned a wildlife water supply system at a conservation zone on the Yaramoko property which led to marked improvement in conditions for local wildlife and enabled the reintroduction of several species that had disappeared and been presumed extinct, including turtles, monkeys and the duiker, a small brown antelope long-gone from the region.

As part of the reforestation program, Roxgold implemented a capacity-building project for local stakeholders, which involves training 14 local nurserymen on grafting and maintaining a 1,000-tree tangelo farm. A naturally occurring hybrid of tangerine and grapefruit, tangelo has the potential to be a valuable cash crop for the region.

***"Roxgold works to not only mitigate the impact mining has on the natural environment, but to ensure that its long-term impact is beneficial."***

# 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 with the company now focused on ramping up and optimizing operations. 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*



*Processing 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 their 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.



GMS Camps and Accommodations, a spinoff company operated by Pic Mobert First Nation's White Lake Limited Partnership, provides accommodation and catering to transient workers employed by Harte Gold's Sugar Zone Mine, north of White River.

## 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*



*Ngualla camp*



## Health & Safety

Peak has managed to maintain an exemplary health and safety record with no LTIs incurred within the past two 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 are identified by the Ngwala 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.

To date, Peak has funded, assisted with, or donated to, the following projects in the Ngwala 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 Ngwala Primary School (accommodation for four teachers and their families)
- Donation of new football kits and equipment
- Donations and assistance for official visits including delegate transport
- Emergency medical transport
- Village water supply maintenance
- Road maintenance
- Assistance with airstrip preparation and maintenance

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.

## 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.

### At the end of the 2015 drilling program, Peak drilled water bores at both Madadomia and Itiziro

Hand pumps were installed and the concrete bunding was constructed around the pumps. The hamlet of Madadomia is approximately 20 minutes' drive north of Ngualla. The nearest water source was Ngwala Village and usually took a villager in excess of four hours round trip to collect water.

The bore-hole pump now provides a local source of clean water to the hundreds of people in Madadomia and the surrounding area. The water bore pump at Itiziro was installed approximately 20 metres from the newly constructed Teachers' houses. Peak has also provided people, tools and equipment to assist in maintaining the village water supply as well as donating materials including PVC piping and valve components. As the tank is fed by a natural stream, sediment can accumulate inside and needs to be cleared out regularly.



Peak provided school classrooms



Children site visit



First bucket of water from donated well

***"Peak has funded, assisted with, and donated to many community projects in the local area close to the mine."***

# 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.



*Drilling at Kalbar Resource's Fingerboards Project in Victoria, Australia*



## Health & Safety

In all aspects of its activities, Kalbar is committed to providing a safe work environment where no injury or harm to health is considered acceptable and all activities are undertaken without compromising safety and health. Kalbar adopts the preventive principle that a zero injury frequency rate is achievable and therefore it is a key management objective.

Coronavirus has presented a fast evolving and significant challenge to global health systems and economies and as such has required Kalbar to develop a COVID-19 plan able to evolve as each situation changes. To ensure Kalbar is prepared for any changes, a 'Traffic Light' action plan was developed. This plan is reviewed at the weekly toolbox meeting and changes are made as required. The weekly review will consider:

- Latest advice to hand from the Chief Health Officer
- Transmission rate of COVID-19 in East Gippsland
- The relevant column in the plan (using column description)
- Apply the recommended actions in the column beneath the relevant phase

All employees are notified each week of any changes within the plan and of the current status Kalbar is operating under. Employees are encouraged to work from home if able and utilise online meetings and discussions. Deliveries and outside contractors are required to complete a COVID-19 declaration stating their current health and recent travel. Kalbar is committed to reducing the spread of COVID-19 on all platforms of its workspaces and will continue to adhere to the strict requirements as detailed on DHHS website. All positive COVID-19 cases are now required by law to be reported to Worksafe under Part 5 of Occupational Health and Safety Act 2004.

## Social Responsibility

The Fingerboards Project will generate numerous benefits and opportunities for the local area, wider region and state, including economic benefits through approx. A\$190m of capital expenditure, operating costs of A\$2.4bn and revenue of A\$4.9bn. Royalties to the government are expected to be about A\$115m, and total taxes over A\$650m.

The project will create 200 jobs in the area, with a further 200 created in support services and industries that will supply the mine. Kalbar will preferentially employ local and regionally based personnel where practicable. There will be additional safety benefits through upgrades to existing sub-standard roads and intersections in the local area.

**A\$190m**

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

**A\$4.9bn**

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

**A\$2.4bn**

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

**200 jobs**

The project will create 200 jobs in the area

**During the past year, Kalbar has been proactively engaging with East Gippsland businesses and suppliers to understand the impact that the Fingerboards Project could have on local businesses should the Fingerboards Project be granted approval to proceed.**

Through networking and collaboration, the Regional Infrastructure Working Group was formed – a Kalbar initiative to help identify the existing skills, capabilities and skills gaps in East Gippsland. The Working Group has grown rapidly and organically with participation increasing to include representatives from local trades, transport, horticulture and civil contracting businesses, TAFE Gippsland, other East Gippsland mining proponents, the Minerals Council of Australia, and government agencies.

To date, accessing training and upskilling locally has been challenging for East Gippsland businesses as apprentices and trainees have needed to commute to the Latrobe Valley or beyond to Melbourne for the classroom components of training. The Working Group is now exploring opportunities to provide relevant education pathways for trades and skills training in East Gippsland, in collaboration with TAFE Gippsland and Federation University. Kalbar is proud to be at the forefront of this Working Group to ensure that future demands in East Gippsland are met which will help reduce impacts on other industries where mining activities are growing. These actions assist communities to become more self-sufficient and less dependent on imports or non-local supplies and services. Control stays in the local community and where Kalbar believes it belongs.

Typically, local businesses are owned by people who live in the local community, are less likely to leave and are more invested in the community's welfare and future. Kalbar is a local business and its staff are invested in the East Gippsland community.

Kalbar is a member of GROW Gippsland which is a government initiative to promote the networking and collaboration of areas to increase local content whilst enabling social procurement. This program has been a huge value to Kalbar in finding suppliers on its doorstep that Kalbar was otherwise unaware of.

**100** registrations

Kalbar currently has an expression of interest with ICN Gateway which had an uptake of 100 registrations in the first two days

**580** businesses

Through the ICN Gateway, 580 registered businesses have already expressed their interest in the Fingerboards project

Amongst the organisations that Kalbar is cooperating with is ICN Gateway, a government funded organisation which has been running in Australia for 30 years. Only since 2017 has Gippsland had its own Industry Advisor in the form of Colin Young. Colin's background is from the power industry and has been pivotal in running industry forums and events to allow connection and networking.

Kalbar currently has an expression of interest with ICN Gateway which had an uptake of 100 registrations in the first two days. A record in Victoria with the numbers still growing. 580 registered businesses have expressed their interest in the project.



Kalbar is also undertaking various sponsorship programs. Amongst others, the company is sponsoring Aislin Jones (left), a female skeet shooter from Lakes Entrance. Aislin won the Australian National Championship in 2016 to become the youngest woman to hold that title and represented Australia in the Rio Olympic Games the same year. She has won numerous Championships both nationally and internationally. Kalbar's sponsorship contributed to her being able to train and compete to a spot in the Australian Shooting team for the Commonwealth Games in 2018. Aislin is currently competing in the Tokyo Olympics selection and is a proud Gippslander paving the way for more women in the shooting sports arena.

Kalbar was also a major sponsor for the Twin Rivers Bream 2019 Classic event which showcases the pristine waters of East Gippsland and assisted in promoting more people into fishing as an outdoor activity.

In addition, Kalbar employees attended and assisted with sponsorship for the Biggest Blokes BBQ to raise funds and awareness of Prostate Cancer. Kalbar have been active in this space for a number of years.

Another event that Kalbar sponsored in 2019 was the local East Gippsland Football Netball League which covers much of the area the Fingerboards Project will have an impact on in terms of workforce and suppliers. Representation was through advertisements within the weekly game books at each of the 6 games along with some print media on shirts and training tops.

### **Kalbar also attended and sponsored the Victorian Mine Rescue event at Yallourn, Morwell which was run by the Minerals Council of Australia**

This was the first time that Kalbar participated in this amazing event. Kalbar has now begun a collaboration with two other local mines hoping to be operational around the same time. The intention is to have an East Gippsland Alliance Mine Rescue team.

### **Environmental Stewardship**

Kalbar supports a range of environmental initiatives throughout the process of gaining approvals for the project. Kalbar's commitment to the local environment is evident with its flagship Native Grasses Rehabilitation project initiated and lead by Dr Paul Gibson-Roy.

Grassy woodlands are common features across many agricultural landscapes. They can broadly be identified as areas of open grassy paddocks with scattered large trees. However, while common, almost all are dominated by exotic species including pastures and crops. Very few grassy woodlands dominated by native species remain.

Before Europeans arrived in Australia, indigenous peoples managed the landscape meticulously to ensure their food, cultural and spiritual needs were met. In large part, this was done using carefully planned firestick burning by which means they were able to manipulate the structure and composition of native vegetation to high degrees to match their various needs. Therefore, the open grassy woodlands and grasslands first viewed by Europeans were to large degrees artefacts of aboriginal management.

In these open states they were viewed as prime lands for agriculture (rather than denser treed bushland that had to be laboriously cleared). Over time, as agricultural practices became more intensive (e.g. artificial fertilizers, pesticides, hybrid varieties), factors such as overgrazing and extensive cropping led to the decline of native grasslands and grassy woodlands, and in many cases, local extinction of native species.



**Today, grassy woodlands are among Australia's most threatened ecosystems, and indeed, Gippsland Redgum Grassy Woodlands and associated grasslands are a nationally EPBC-listed (Environment Protection and Biodiversity Conservation Act) threatened plant community.**

For this reason, the Fingerboards project has set itself ambitious goals to play a part in reversing this critical loss of native biota. As part of its post-mining rehabilitation, Kalbar has committed to plans that will attempt, over the 15-20-year mine life, to restore species-rich native Redgum Grassy Woodland to ~200 hectares of its project site in an area that is currently Bluegum plantation forestry. If successful, this would be likely to represent the largest and most complex ecological restoration of its type in Victoria.

Kalbar's Grassy Woodland restoration project will not be simple or straightforward. However, Kalbar staff are committed to achieving these outcomes. Securing adequate supplies of native seed from a broad range of species will be a major hurdle, and Kalbar will develop native seed 'farming' approaches to do so. Kalbar hopes to harness the skills, knowledge and enthusiasm of many Gippslanders to reach these ambitious restoration goals. Key actions, that include the development of early seed production capacity, have already commenced.

***"To this end, Kalbar staff very much look forward to engaging with stakeholders, regulators and community over coming years to create a key environmental legacy for the Gippsland region."***





**Appian Capital Advisory LLP**

5th Floor  
45 Pall Mall  
London  
SW1Y 5JG  
United Kingdom

[appiancapitaladvisory.com](http://appiancapitaladvisory.com)

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