

Appian Annual Sustainability Report November 2022



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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 a project's 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 2021 to June 2022.

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



TECHNICAL

- 1. Geology, resource quality and exploration
- 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 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
- 3. Commodity fundamentals
- 4. Returns-Multiple of Money
- 5. Financeability
- 6. Ability to exit
- 7. 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.



>5,000 jobs created directly



~11,000 jobs created indirectly



~US\$7m investment in community development related activity over portfolio



17% women in workforce



60% local employment



Source: Atlantic Nickel employees showing their Great Place to Work certificate, which they received for a second consecutive year

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 Western Potash employees are local residents
- Atlantic Nickel, MVV 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 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
- Professional training opportunities

MESSAGE FROM NELSON SILVA

APPIAN'S SENIOR SAFETY AND SOCIAL PERFORMANCE ADVISOR



"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."

2022 has been a good year in the life of Appian. As the world recovered from the pandemic, Appian recruited new talent and invested in new mining projects. Sustainability has been a big part of our efforts.

The decarbonization across industries has created major shifts in commodity demand and will continue to do so. At Appian, we like to analyze 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. ESG targets are being adopted 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 being 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.

Appian's safety standards have resulted in world-class safety performance. Continuous, personal and accessible messaging has created a safety culture beneficial for everyone.

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. It comes as no surprise that both operations have been awarded with Gold labels for their efforts. To further leverage the increasingly permeable borders between mining and adjacent sectors, Appian have hired Juliana Marreco as co-Head of Clean Energy Solutions with a remit to consider renewable energy solutions for our existing portfolio and evaluating opportunities across the pipeline

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'), aligned 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 was the Great Place to Work certification, which has been given for a second consecutive year.

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

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

Best wishes

Nelson Luiz Costa Silva

Senior Safety and Social Performance Advisor

CLEAN ENERGY, SAFETY AND COMMUNITY RELATIONS



"Appian's long-term plan is to support its operation with renewables investments everywhere it operates."

Juliana MarrecoCo-head of Clean Energy Solutions
Appian Capital Advisory LLP

The climate change challenge as we understand it, is an urgent and shared responsibility of all; Especially in mining. The mining industry is responsible for 4-7% of global greenhouse gas emissions -1% of these are from Scope 1 and 2 emissions, caused directly by mining operations or indirectly through, for example, electricity consumption used to power mines; the remaining 3-6% coming from fugitive methane emissions.

In addition to providing the supply side of critical minerals, Appian is now also targeting renewable energy investments, to supply its own energy consumption with clean energy at the same time as it increases renewable installed capacity in every location it is present.

Renewables represent a vital pillar in the global effort to reduce and ultimately phase out fossil fuels, increasing national resilience in the face of fossil fuel price volatility.

These investments will create local job opportunities and support the social license for operation in these locations. According to the latest *Renewable Energy and Jobs* released by IRENA, in Brazil for each photovoltaic MW installed, 20 jobs were created in 2021.

Both society and investors are now demanding greater transparency when it comes to the triple bottom line — the true social, economic, and environmental impact. For a mine to be carbon neutral, energy must be a core focus of the overall design, operational planning and execution, during the life of the mine and beyond.

Particularly for mid-tier projects, adding a renewable component to plans for building a new mine or expanding an existing one could unlock barriers in securing project financing.

The growing competitiveness of renewable energy with declining costs for solar and wind generation provides an investment opportunity where it is possible to reduce power costs, hedging it against market price fluctuations and maintaining security of supply.

Photovoltaic projects are being studied to partially supply Atlantic Nickel and MVV power demand, and a distributed generation portfolio is also under analysis in Brazil. Appian's long term planning is to support its operation with renewables everywhere it operates.

As well as reputation, license, social acceptability, and health, safety, and environmental (HS&E) benefits, the electrification of mines, including the transition to electric vehicles, can help create a safer and cleaner environment for front-line workers, including better air quality for those working underground.



"Appian has been contributing to the development of the host communities that will last beyond the life of the mining operations."

Silvio LimaHead of Corporate Affairs, ESG and Community Relations *Appian Capital Brazil*

With our advanced programmes in Brazil, Appian has been able to contribute to the development of regional education, female empowerment, income generation and the development of local suppliers for additional strategic categories.

In addition, Appian has been recognised as a 'Great Place to Work' for the second consecutive year. Due to a strong safety culture that permeates the organization at all levels, the Brazilian operations maintain their best-in-class safety records. Furthermore, no incidents have been reported in our tailings storage facilities to date.

In conjunction with local authorities and communities, Atlantic Nickel and Mineração Vale Verde conducted emergency drills throughout 2022, with 89% of the families actively participating in the Atlantic Nickel exercise, serving as a benchmark for attendance and planning.

Appian is committed to developing ESG processes, which have the potential to be scalable and replicable, yet will always be tailored to meet unique operational needs, supporting safe and responsible operations worldwide.

APPROACH TO SUSTAINABILITY AND ESG PERFORMANCE

Appian regards social, environmental and governance standards as crucial elements within all investment opportunities and is committed to working in close partnership with all its portfolio companies to oversee that they implement and adhere to best-in-class international standards and guidelines. 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.

Appian is a signatory to the below organisations as partners to our ESG strategy:



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.

ICMM

International Council on Mining & Metals ("ICMM") Sustainable Development Framework

- The ICMM's Sustainable Development Framework is widely recognized as the metals and mining industry's best practices for sustainable development
- Post-investment, Appian and its portfolio companies undertake a gaps analysis of the relevant performance standards to identify where those standards should continue to be improved throughout Appian's investment period
- Appian implements active monitoring of progress through monthly meetings with its relevant boards



ESG Data Convergence Initiative

- The initiative aims to create and release ESG private market benchmarks which can be leveraged to help translate high-level ESG objectives into material and tangible impact
- The standard can allow sponsors and their portfolio companies to precisely benchmark their current position to facilitate progress towards ESG improvements, whilst enabling greater transparency and better comparability for investors
- 7 sponsors have worked alongside 9 investors and the Boston Consulting Group to determine and agree on 6 core ESG metrics covering greenhouse gas emissions, renewable energy use, diversity of board members, work-related injuries, net new hires and employee engagement
- More than 230 GPs and LPs with ~US\$22 trillion in AuM have so far signed up

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, ~18% of the employees are women, of which 39% are at BH office (Shared Services) and at the site 16%. At MVV, ~20% of the employees are women, of which 34% are at BH office (shared services) and at the site ~19%.

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. This budget is being 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





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, a project to support banana growing as well as a Music and Art project at ATN and a Women Entrepreneurs and Poultry Farming project at MVV. There was also a solidarity campaign for those impacted by the heavy rains in Alagoas.



Local courses are provided for women to train in a variety of jobs

The STEM teacher training program has been a successful initiative. More than 96 teachers from public elementary schools were trained during the 2-year program, and 1,300 children participated. The pilot program was rolled out to 5 schools in Craibas (Alagoas), the region where MVV is located, in late 2020. Next year, the plan is to roll out the program with Educando and a regional partner in the neighbouring state of Bahia. AWCF sees a multiplier impact on the community by training teachers.



training programme

1,300 children

The number of children participating in the project was over 1,300

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



The Women Entrepreneurs Project

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. The program gained traction but has been paused as the company focuses it's efforts on re-submitting an Environments Effects Study.

Once the project has sign-off, grant funding will be available again for projects within the educational, recreational, environmental and social field of the community in which the company operates.



The Poultry Farming project currently produces around 18,000 eggs per month

As the Appian investment portfolio grows, the company will be evaluating where to invest and support projects and programmes that will create a maximum impact for each dollar spent. The foundation will assist Appian's portfolio companies in allocating capital into the most impactful social programs.

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

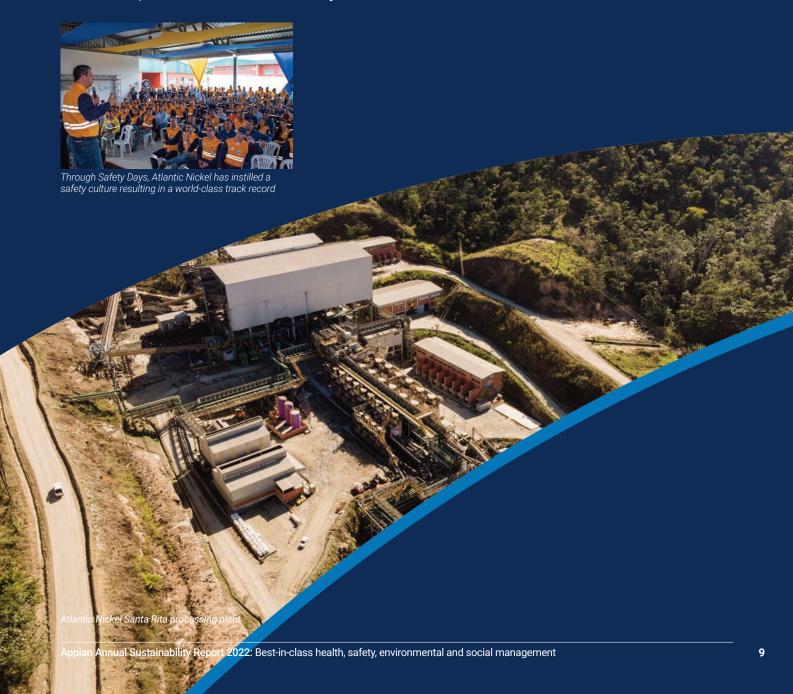
APPIAN CAPITAL BRAZIL

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.



MINERAÇÃO VALE VERDE ('MVV')

COPPER-GOLD, BRAZIL

The Serrote project is an operating, de-risked greenfield copper-gold producing asset that completed construction in June 2021 and shipped its first concentrate in Q4 of that year.

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.



ATI ANTIC NICKFI AND MVV

Appian Capital Brazil

Appian Capital Brazil ("Company") 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. Appian built an ESG and community focused team to focus purely on these factors.

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, UN PRI, the International Council on Mining & Metals, UN Guiding Principles on Business and Human Rights and ILO 169.

Environmental stewardship

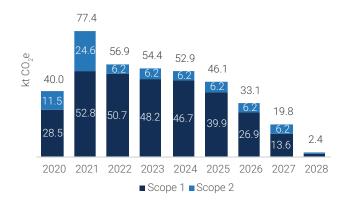
Environmental sustainability is a core element of Appian's strategy. Appian is focused on both managing responsively the impact of its operations on the environment and resources it uses, as well as contributing to the global effort toward addressing climate change.

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.

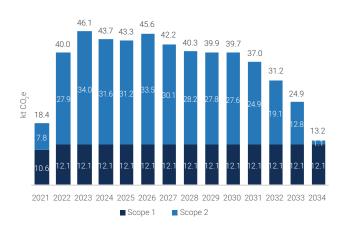
The Company self-reports its GHG emission in line with the Greenhouse Gas Protocol standard. In 2021, the activities of Santa Rita resulted in the emission of 77.4 thousand tons of $\rm CO_2$ -e across Scope 1 and 2 (of which 52.8 thousand tons of $\rm CO_2$ -e of Scope 1 emissions) and those of Serrote resulted in the emission of 18.4 thousand tons of $\rm CO_2$ -e across Scope 1 and 2 (of which 10.6 thousand tons of $\rm CO_2$ of Scope 1 emissions).

Annual estimation of GHG emissions (Santa Rita)



Source: Data provided by Santa Rita

Annual estimation of GHG emissions (Serrote)



Source: Data provided by Serrote

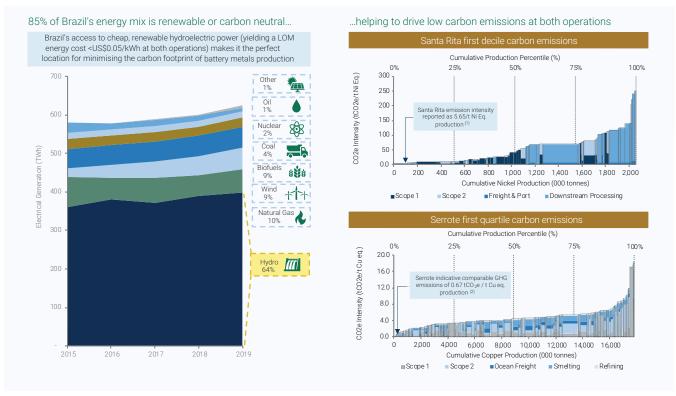
The Company's Scope 1 and 2 GHG emissions are forecasted to peak in 2021 as the result of necessary vegetation suppression for the TSF heightening at Santa Rita. Aggregate Scope 1 and 2 GHG emissions across both sites are forecasted to decrease thereafter, primarily as a result of reduced vegetation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

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 a performance target set at 85% or higher.



Sources: IEA Brazil data & statistics; Clean TeQ, Skarn Associates Limited

1. Annual 2021 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 2021, 70% of water was reused at the Santa Rita Mine and the Serrote Mine recycled approximately 90% of the water used in the mineral process. Both sites are in low to medium water-stressed areas

Santa Rita mine to become a zero discharge facility

Mina Santa Rita is evolving to become a zero discharge facility. A contingency pond will be built allowing the reuse of 100% of the effluents generated on the site, being reused in the production process in a closed circuit. The pond aims to absorb excess water in rainy periods or plant maintenance stops where water consumption is lower. The executive engineering project has already been completed. The pond will measure approximately 110,000 m³, and with a construction period of 4 months, is scheduled to be built in 2023.

Mina Santa Rita will have zero effluents being discharged into the mixing zone, further improving its environmental performance.

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 IFC 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.

CONTINUED

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 m³ 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 605 people in 2022, 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 received 134 visitors this year.

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".

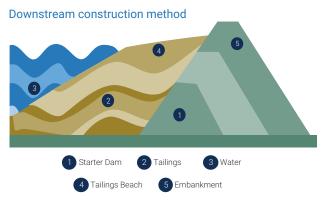
Santa Rita is also pursuing a revegetation project which was inaugurated on World Environment Day June 5, 2020, with an optimized irrigation system to ensure less water consumption. In 2020, 20 ha were recovered, and 8,948 seedlings were planted. In 2021, the Company recovered 66 ha planted approximately 48,000 seedlings and by October 2022 these numbers have risen to 79 ha recovered and 54,000 seedlings planted.

Significant investments in tailings management

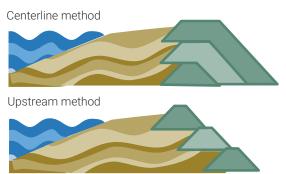
Appian takes a rigorous approach to the design, engineering, and management of its Tailings Storage Facility ('TSF') and maintains continuous improvement processes to ensure full adherence to the Dam Safety Guidelines of the Canadian Dam Association.

The TSFs at both assets were built using the safest methodology available, under the highest technical and safety standards. Both assets are robust downstream raised rockfill dams designed by Wood plc, the acting Designer and Engineer of Record (EoR)

Construction methods



Other construction methods



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.

Global Industry Standard on Tailings Management (GISTM)

The International Council on Mining and Metals (ICMM) has launched two new resources to support continual improvement in the safe and transparent management of tailings facilities: Conformance Protocols for the Global Industry Standard on Tailings Management and a Tailings Management Good Practice Guide.

With the purpose of further raising the level of excellence in the tailings management, in addition to the CDA and Brazilian Regulation (Resolution 95), both assets initiated a gap assessment process in order to achieve compliance with the GISTM.

CONTINUED

A robust workplan was established and specialized consultants were hired to carry out the activities. Implementation plan progress is reported weekly to senior leadership.

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

and MVV respectively

- leading and lagging safety indicators
- visible felt leadership program (with 5,400+ visible felt leadership engagements at Santa Rita, and 2,500+ visible felt leadership engagements at Serrote between October 2019 and June 2022
- 73,000+ hours in safety, health and environmental training at Santa Rita and 8,000+ hours at Serrote YTD (by June 2022)
- 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

To strengthen the safety culture and develop the right behaviors, each year the Company organises a Safety Day in order to celebrate and raise awareness around the theme 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.

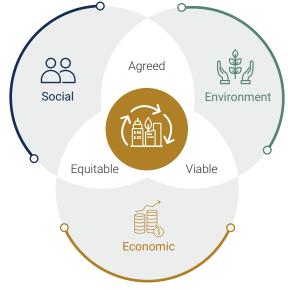
Accumulated rates of occupational injuries with and without lost time involving employees and third parties

	Santa Rita		Serrote	
Year	LTI	NLTI	LTI	NLTI
2019	0	2.20		
2020	0.60	1.19	0.35	1.25
2021	0.20	2.02	1.34	1.79
January 2022	0.20	2.17	0.97	1.94
February 2022	0.19	1.75	0.99	1.98
March 2022	0.20	1.98	1.05	2.10
April 2022	0.39	1.94	1.08	2.16
May 2022	0.38	1.71	1.12	1.66
June 2022	0.37	1.30	1.11	1.67

Source: 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 people and their development and well-being.



Source: ERM, 2021

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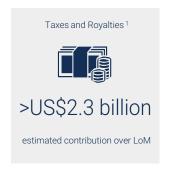
Appian considers national development plans and applies a stringent set of environmental and social criteria in its investment and business decision-making to ensure it evaluates and manages the impacts on people and communities that may arise from its operations.

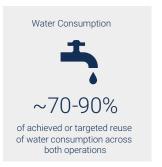
Appian practises a concept of Social Integration in lieu of the more traditional concept of Social License to Operate. Social Integration means that the Company is part of the territory just like any other member of the community or any other stakeholder. Like any other member of its communities, the 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 aligns 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

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, 76% of employees were hired locally (up from 65% the previous year) while 24% were hired regionally. At Serrote, 64% of employees were hired locally and 36% from outside the region of Alagoas.

For two years in a row, Appian Capital Brazil was certified as a Great Place to Work, by the homonymous consultancy. Through a survey, Appian achieved a better engagement among its employees from 63% to 80%, maintaining an average of 86% of approval in both surveys. Robust action plans derived from both opportunities and responses as partnership with Gympass and Psicologia Viva, focusing on physical and mental health, along with focused leadership training arised in 2021.

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.

CONTINUED

In 2022, Appian started the development of its D&I Strategy, a corporate volunteering policy, and established a programme for recognizing employees for living the company's Values. The score achieved by Appian is close to those obtained by the 150 best places to work in Brazil.

Social investments 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\$2.2 million in expenditure was approved across all programs for 2022. Approximately 37,000 people have benefited directly from these initiatives.

Summary of social investments made in 2022 at Santa Rita

US\$20.000 invested in cocoa harvesting and beneficiation

US\$10.000 invested in 5 social projects developed by the community, impacting around 800 people

Partnership between Atlantic Nickel and the municipality of Itagiba, to invest in banana growing

Investments in public education through the implementation of STEM methodology within localschools?

ATN's workers and subcontractors are organized to engage local community projects²

Professional courses tailored to the ZAS necessities and vocation

Source: 2022 Santa Rita

Notes:

- 1. Online classes during Covid-19
- 2. Projects on standby during Covid-19 pandemic

Summary of social investments made in 2022 at Serrote

R\$99,388 donated and closely monitoring cases within MVV and its contractors

Poultry farming

Partnership to provide rural technical assistance. associateship and distribution support (SEBRAE)

50 local workers trained as mine operators. Training was offered to local workers so they can see opportunities outside MVV

Conclusion of partnership with Educando, resulting in 5 schools supported, 96 teachers trained in the methodology and over 1,300 student beneficiaries

Project to engage local women and foster entrepreneurship through professional training courses and consultancy

industry

Partnership with Sesi and Senai to build a role model school in the Craibas municipality and to train teachers and school managers

Source: 2022, Serrote

- 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

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.

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



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



A public hearing was held by INCRA, in which MVV and Proactiva (the consultancy hired to develop the FPIC) presented the community with the results of the study. The final version will be submitted to INCRA and the community. The action plan will be started by the end of 2022

Source: ERM, 2021

Notes

- 1. 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
- 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 started holding weekly virtual dialogues with the Carrasco Quilombola Community as part of the Free Prior Informed Consent (FPIC) engagement process and is continuing the dialogue post-COVID.

CONTINUED

A closer look at the social investments

Women Entrepreneurs Project

In 2018, a Participatory Rural Diagnosis (PRD) was held, identifying a desire by women from the communities surrounding the Serrote project, to have projects aimed at women.

The Women Entrepreneurs Project aims to develop economic alternatives in the direct area around MVV. These comprise of training for women to produce and sell agricultural products such as cake, pies, sweets and snacks, and so enabling the increase of family income.

The main objective of the project is to bring more momentum to their sales (volume and revenue), increase profit margin, by offering products with greater added value.

Today, the project has 19 women from Craibas producing cakes, pies, snacks and coconut sweets. 80% of the group says it has been useful in improving the production and financial management of each one, making them a monthly profit higher than expected. Many of them lived on social benefit assistance and now they have their own income.

In October 2022, after concluding 10 professional training courses totalling over 400 hours of training, in partnership with MVV and Senai the project opened a store in the city of Craibas, (homeland of those women) providing permanent additional income.





Source: MVV

Cocoa Project

The Cocoa Project was created to support farmers living in the direct area around Santa Rita, and who harvest cocoa and have this activity as their main source of income.

The farmers who are partners of the project have access to an existing cocoa plantation area within the Santa Rita Mine. The main objective of the initiative is to strengthen the local culture of cocoa growing and beneficiation, through a programme focused on sustainable development, generation of employment and income, conservation of biodiversity and strengthening of family farming.

In 2022 the project is conducted in partnership with Sofrê Institute, a non-profit organization in the city of Itagibá, which is currently carrying out the project management, technical guidance to farmers and continuous monitoring with the purpose of improvements in production and consequent increase in farmers' income generated by the cocoa harvest. Income recently reached around US\$3.6k per year, in a region with GDP per capita around US\$2.5k per year.





Source: Atlantic Nickel

CONTINUED

STEM Project

The STEM project was an initiative started by the Appian Way Charitable Foundation. The STEM Brazil Programme started in Brazil in 2009 and already trained more than 9,000 teachers in more than 1,000 schools reaching more than 700,000 students. The programme offers an exclusive schooling, based on a unique methodology emphasizing a hands-on approach for the STEM area of knowledge.

The partnership with Educando, aims to prepare and provide quality support to natural sciences and mathematics teachers who currently teach in public schools. The mission is to dramatically improve teaching standards so that K-12 students advance their studies and pursue careers in the economically critical areas of engineering and other technical fields.

In Craibas, the project resulted in 5 public schools training 96 teachers during 2 years in in-person and online sessions reaching over 1,300 students. The teachers now have access to the online community of STEM programme.

The success of the programme can be seen through the testimonials from participating teachers. An implementation in schools around Atlantic Nickel is planned for 2023.





Source: MVV

Solidarity campaign for those impacted by the rain in Alagoas

In May 2022, amid the heavy rains that hit the state of Alagoas and as a result of the consequences, Mineração Vale Verde started the "Solidarity Campaign for those Impacted by the Rains". The campaign was carried out focussing on three main areas: clothing (including coats and blankets); non-perishable food and personal hygiene items (soap, shampoo, sanitary napkin, baby wipes, baby diapers, toothpaste, toothbrush, toilet paper, etc.)

For donations, "Solidarity boxes" were spread on the website, in addition to the "Love Hanger" (for clothes) and the "Thermometer of Love", showing an overview of the volume of donations collected at MVV. The goal was to reach 1,000 items.

In less than a week, through the donation of MVV employees, the "Thermometer of Love" reached the top — Level 10 —, surpassing the goal of 1,000 items, accounting for 1,061 items, including 45 toiletry kits, 38 food baskets and 25 pieces of clothing.

In addition to these collections, the company also donated food baskets to countless families affected by the rains in the Agreste of Alagoas, distributing them among the municipalities of Craíbas (150 baskets), Arapiraca (250 baskets) and Penedo (300 baskets). These materials were delivered to the Civil Defense of Craíbas and Arapiraca and to the Municipal Assistance Secretariats.







Source: MVV

FORTUNA SILVER (FORMERLY ROXGOLD)

GOLD-SILVER, PERU, MEXICO, ARGENTINA, IVORY COAST AND BURKINA FASO

Fortuna Silver Mines Inc. is a Canadian mining company dedicated to the production of precious metals in Latin America and West Africa. In June of 2021, Fortuna acquired the asset base of Roxgold Inc.

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.

The Séguéla Gold Project in Ivory Coast has been omitted from the write-up as the asset is not yet operational. Information on Séguéla and a breakdown of data on all assets can be found on www.fortunasilver.com/sustainability/overview





Framework and combination with Roxgold

Fortuna's sustainability framework was developed to manage their approach to sustainability, aligned with the UN Sustainable Development Goals. Fortuna continue to refine their sustainability strategy and their associated five-year sustainability plan, which includes key performance indicators (KPIs), targets and commitments, ensuring that it reflects the changes to their business as a result of the Roxgold acquisition. After the acquisition, the company revised all of its short, medium and long-term ESG targets to better reflect the changes to its business. Importantly, ESG metrics are integrated into compensation.

The integration process, although complex, was well planned and ultimately successful owing to the collaboration of multiple teams and experts. During the integration process, Fortuna sought alignment on five main fronts: Harmonisation of Policies, Framework and Standards; Management systems; Financial reporting; Prioritization of corporate Key Performance Indicators (KPIs); and Information Technology (IT) systems.

With the acquisition:

- Fortuna's overall ESG approach has strengthened as it draws upon both companies' best practices
- Fortuna adopted two new company-wide policies: the *Employee* Relations Policy and the Community Relations Policy

Overall, the integration process made it possible to identify potential synergies and additional sources of value to be included in the company's plans in the coming years and preserved the best elements of people, operations, processes, and experiences of both businesses. It was a process that flowed harmoniously, with no interruptions, and was completed on time, while the overall ESG performance expectations were met.

Enhancing data collection and data quality

Fortuna has been focused on enhancing ESG data collection to strengthen alignment with key ESG reporting frameworks including the GRI Standards, the SASB Standards and the TCFD Recommendations.

An in-depth review of the corporate carbon footprint tool was held in 2021. This review was conducted by accredited auditors with expertise in corporate sustainability and aligned with international standards such as the Intergovernmental Panel on Climate Change (IPCC) and the Greenhouse Gas Protocol. During this review, we defined a robust methodology to quantify and report GHG emissions and removals based on the requirements of ISO 14064: 2018 Part 1. This work included the following key steps:

- Organizational limits were established, the control approach was defined and Scope 1 and Scope 2 GHG emissions were evaluated
- The processes of each subsidiary were reviewed and the sources of emissions were defined and classified as fixed combustion, mobile combustion, process emissions and fugitive emissions
- The official sources of information were identified and the methodology for the calculation for each emission source was established
- The local and/or international emissions factors for conversion to tonnes of CO2 equivalent were identified and defined

- An updated version of the corporate emissions calculator was developed, which includes defined criteria such as emission factors, global warming potentials and methodologies, among others
- Carbon Footprint Calculation Standard and Carbon Footprint Quality Control Standards were developed as corporate guidelines

Non-significant emissions were also identified (less than 2% of the total carbon footprint) and 2021 was defined as the base year.

Stakeholder engagement

Each of Fortuna's subsidiaries have undertaken stakeholder engagement exercises to identify their stakeholders and their sustainability priorities. The subsidiaries engage with stakeholders frequently. For example, in 2021 the Yaramoko mine conducted 293 stakeholder engagement activities.

A materiality assessment plays an essential role in our sustainability approach because it enables the company to prioritize topics that generate value for the company and its stakeholders; financially material ESG factors likely to impact company value, and therefore of most interest to our investors and financial stakeholders, as well as identifying the sustainability factors that are of significant interest to our broader stakeholders.





Environmental

Fortuna tries to design, construct, and operate its mines based on the efficient use of energy and resources, protection of the environment and biodiversity, in compliance with all applicable laws and international guidelines.

Fortuna's Environmental Policy, which is approved by the Board, is guided by the ISO 14001:2015 Environmental Management Systems Standard. It outlines its commitment to protecting the natural environment wherever they work.

At each site, there is a health, safety, security and environment committee responsible for environmental factors. The company provide annual training on relevant HSSE topics to supervisors within its subsidiaries and contractors, so that they can in turn train employees. The 2021 training program covered environmental requirements and high risk activities.

Environmental Management Systems

Fortuna aim to achieve certification of the environmental management system (EMS) at each of its operations to ISO 14001. At San Jose, it was not possible to achieve the planned certification in 2021 because COVID-19 prevented site visits. Certification has been rescheduled to 2022.

In 2021, there were zero significant environmental fines or penalties issued by regulators.

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Waste and Hazardous Materials Management

Effective management and reduction of waste can reduce operational and compliance costs, avoid fines and penalties, facilitate permitting, and protect a company's reputation in the communities where it operates.

Fortuna's operations include tailings storage facilities (TSFs) and heap leach facilities (HLFs). Tailings management is a high priority for investors, regulators, communities and other stakeholders, because tailings dam failures can lead to loss of life or significant damage to property and ecosystems.

Fortuna's operations are subject to waste regulations.



Tailings Management

Fortuna's Tailings and Heap Leach Management Standard, which is based on the guidelines of the Mining Association of Canada and the Canadian Dam Association, requires to locate, design, build, operate, and close all TSFs and HLFs using a risk-based approach with site-specific data, or as specified by local regulatory requirements (whichever approach is more stringent). The standard covers facility integrity, governance, monitoring and emergency preparedness and applies to its Latin American operations.

At Yaramoko, the TSF management approach is based on the Industry Standard ANCOLD Guidelines on Tailings Dams and an operating manual has been established to ensure that TSFs are managed to prevent any hazards that could lead to incidents affecting employees, communities, or environment.

The monitoring program at Yaramoko includes:

- · Visual inspection to assess any anomalies or variations
- Aerial photography focused on the tailings and supernatant pond extents within the TSF
- Installation of standpipe piezometers in embankments in order to monitor porewater pressures at several locations within the embankments to ensure that stability is not compromised
- Installation of settlement pins on embankment crests to monitor embankment movements and assess effects of any such movement on the embankment
- Surface water and groundwater quality sampling both upstream and downstream of the facility to facilitate early detection of changes and remediation of any seepage both during operation and following decommissioning

Annual risk assessments are conducted at each subsidiary except for Caylloma, which conducts bi-annual risk assessments. Subsidiaries also conduct emergency response tests and evacuation exercises.

All of the Company's tailings storage facilities were externally audited in 2021 and no significant risks were identified under the applicable standards. In 2021, Fortuna began a gap assessment to identify whether any gaps exist between current tailings facility management practices and the Global Industry Standard on Tailings Management. Fortuna recognize the Global Industry Standard on Tailings Management Standard as leading practice and acknowledges that this Standard will help them strengthen their current practices by further integrating social, environmental and technical considerations to its tailings facilities' entire lifecycle.

Hazardous and Non-hazardous Waste Management

Fortuna's mining operations generate a range of hazardous and non-hazardous waste. Its operations have specific management plans and guidelines governing collection, separation, storage, reuse, and disposal of waste, reflecting local legislation and the commitments in our environmental impact assessments. Waste generation and disposal, including the activities of waste disposal contractors, are monitored across operations according to regulatory requirements and our internal procedures.

Examples of initiatives to prevent and reduce waste include:

- · Reusing metal scrap and piping as splices and couplings
- · Recycling wood for donation to local communities
- Reusing empty oil drums for waste collection storage
- Training in the correct identification and classification of waste as hazardous or nonhazardous, to reduce the volume of hazardous waste generated
- Reprocessing residues for use in the concentrate production process
- Substituting the sacks used to arrange dry tailings for a more resistant material, reducing the volume of plastic waste
- Reusing scrap metal from mill maintenance to make planters, which reduces waste and provides shelter for birds
- Building an irrigation system that reuses treated domestic sewage water for growing banana, orange and papaya trees
- Establishing an awareness-raising program for employees and contractors to improve waste collection and sorting efficiency
- Ongoing collaboration with local recyclers

In 2021, there were zero significant spills of concentrate, fuel, hazardous waste, hazardous chemicals, or other substances.



 ${\it Lindero\ Mine's\ outdoor\ meeting\ areas\ are\ built\ using\ recycled\ wooden\ pallets}$

CONTINUED

Water Management

Effective water management can help to ensure continuing access to water, reduce operational and regulatory compliance costs, avoid fines and penalties, and protect a company's reputation in the communities where it operates.

Fortuna's operations are subject to water use approvals and regulations. The Yaramoko mine is situated in an area of high water stress. Accordingly, water recycling is part of the mine design. At Caylloma and San Jose, harmful chemicals are not part of the hydrometallurgical process and the biggest effluent concern is suspended solids. At Lindero and Yaramoko, there is use of chemicals that have the potential to contaminate bodies of water and cause harm if not managed appropriately, including sodium cyanide, hydrochloric acid, sulfamic acid, sodium hydroxide and lead nitrate. Thus, water management is key and a top priority to ensure no significant spills.

Fortuna seek to minimize its operational water consumption, make effective use of water in its processes, and ensure that any effluents are treated to meet required water quality standards.

They have developed water management plans to optimize water consumption and are particularly focused on managing water use in regions facing challenges related to water stress. Fortuna conduct participatory monitoring with local authorities and communities to identify discharges that could impact water quality.

In 2021, there were zero incidents of non-compliance with water quality permits, standards and regulations.

Climate Change and Greenhouse Gas Emissions

In 2021, Fortuna undertook a Climate Change Materiality Assessment to better understand the financially material climate change factors likely to impact company value.

This was an important first step in the development of its Climate Change Strategy to ensure the strategy fosters value creation. The company assessed the materiality of the TCFD's climate-related risks and opportunities based on the potential of the climate change factor to impact company value and the likelihood that a climate-related impact would occur over the short (0 to 1 year), medium (1 to 10 years) or long term (10+ years). The Climate Change Materiality Assessment also took into consideration how climate change factors are connected to other ESG factors and have the potential to increase exposure to ESG risks (e.g. community relations, water management, waste and hazardous materials management, energy management, biodiversity impacts).

Fortuna's approach to climate change management is guided by three key pillars:

- Reduce GHG emissions by promoting resource efficiency and increasing the use of renewable energy sources
- Build resilience to the physical risks of climate change at our operations and projects
- Continuously improve the performance of governance and climate change action plans based on climate change science, regulatory and voluntary frameworks and international standards

Many of Fortuna's absolute metrics increased in 2021 (e.g., Scope 1 and 2 GHG emissions, energy, fuel and water consumption), due to the addition of the Lindero and Yaramoko mine sites, while

intensity metrics decreased due to the significant increase in production and volume of ore processed by Fortuna.

Energy Management

Optimizing energy supply and consumption has financial, operational and environmental benefits. Energy can represent a significant portion of operating costs and energy supply disruptions can impact production. Electricity consumption and fuel combustion contribute to GHG emissions.

Caylloma, San Jose, and Yaramoko use electrical energy from the grid. As a contingency measure, we have on-site power generation plants that are used for emergency energy supply. Lindero does not use electrical energy from the grid instead relying on diesel for energy supply. Overall, 33% of Fortuna's energy consumed comes from grid electricity.

Most of Fortuna's energy (93.23%) is derived from non-renewable sources. Almost all of the fuel consumed by its subsidiaries is non-renewable (primarily diesel). 27% of the electrical energy consumed by Caylloma is from renewable sources, and Fortuna seek to increase this percentage through energy infrastructure enhancement plans. 100% of the electricity consumed by San Jose is generated from non-renewable sources and Lindero does not use electrical energy from the grid instead relying on diesel for energy supply, so focus at these two sites is on energy efficiency. 27% of the electricity consumed at Yaramoko is from renewable sources.

Case study: SAN JOSE SOLAR PANEL PROJECT



San Jose adminisitrative building

At the site level, sustainability performance is reviewed monthly. Through this process, Fortuna identified an exciting opportunity to install solar panels at the San Jose mine to power the administrative buildings.

The Head of the Plant Maintenance team analyzed the feasibility of this project and made the proposal to the HSSEC Latam Committee, where it was ultimately approved. Once approved, the project took six months to be executed, including time to select the service provider and implementation. The solar panel project has been operational since October 2021.

The required investment was US\$32,000 and it is expected to generate annual savings of approximately US\$21,300 with a payback period of 1.5 years. The project is also expected to generate annual reductions of $105 \text{ tCO}_2\text{e}$ (or 0.33% reduction in the site's GHG emissions).

CONTINUED

Air Quality

Fortuna's aim is to ensure that air emissions remain within the specified emissions limits. They use air quality monitoring stations to track our performance in preventing air pollution. Air quality monitoring is carried out by third-party accredited laboratories on a quarterly or semi-annual basis and validated by local authorities. We continually seek ways to improve air quality at our operations.

In 2021, Fortuna operated 35 monitoring stations across all sites and all air emissions concentrations were in compliance with all applicable limits.

27%

of energy is derived from renewables for the Yaramoko mine and 27% of electricity usage at Caylloma 12,253

trees were donated to local associations and villages surrounding the Yaramoko mine

Biodiversity Impacts

As part of its environmental impact studies, Fortuna conducts biodiversity risk and impact assessments. The company prepares biodiversity management plans for approval by the local authorities, which describe the existing biodiversity inventory prior to mining operations, and set out a conservation monitoring plan.

In 2021, as part of the biodiversity management program, the following activities were implemented at the Yaramoko mine:

- 12,253 trees were donated to local associations and villages surrounding the mine site for planting during the year in pursuit of the objective to plant 10,000 trees via a reforestation campaign
- A botanical garden was created in the Bagassi village to enhance students' environmental education in the areas of botany and dendrology
- A safeguarding program was set up in two villages to assist rehabilitation and improve existing village forests inside the area impacted by the mine
- More than 3,000 meters of firewalls were created along the conservation zone inside the mine to protect the forest from bush fires
- Measures to improve biodiversity conditions (e.g. the creation of artificial salt flats were implemented)
- Through an agroforestry development program, Fortuna are committed to promoting the production of tangelo in the areas surrounding the mine. A tangelo producers cooperative was created to continue to develop this fruit species around the Sipohin dam. The program's objectives are to regreen the area around the dam, protect the banks from erosion caused by farming, create new income generating activity for local farmers and to make fruits available for local nutrition

Mine Closure and Reclamation

All of Fortuna's operations have mine closure plans, which may be conceptual, progressive, or final closure plans depending on the life cycle stage of the mine.

Together with the local governments, the company has obligations to make operational and financial provisions to ensure the mine closure plans, rehabilitation and remediation activities are completed.

Social

Fortuna seek to maintain good relations in the communities where we operate, based on dialogue, transparency and respect, and to be a catalyst for social development. Its subsidiaries maintain ongoing dialogue and engagement with community stakeholders. They operate local community service offices, work collaboratively with local authorities, undertake community engagement activities, and participate in community events. They also take part in consultations and participatory meetings to identify and prioritize community development needs.

Grievance Mechanisms

Subsidiary Community Relations departments operate local-level grievance mechanisms through which stakeholders can lodge grievances, which are registered and monitored until they are resolved.

There were zero significant community disputes related to the use of land and resources.

In 2021, Fortuna experienced 17 non-technical delays which lasted a total of 8.83 days at the San Jose mine. Various groups from surrounding communities sometimes seek to disrupt the operations of the mine site as a means to exercise pressure on local governments or organizations. 70% of the non-technical delays were caused by members of the union of haulage carriers due to concerns around the distribution of work within their own organization and the lack of transparency in the union's management. The union members were looking for the Company to help them address these concerns. The remaining 30% of non-technical delays were related to social demands from local communities that were being ignored by the local government. Because the local government was not responding to community requests, the local communities blocked the mine site.

Local Economic Development

Fortuna seek to ensure that presence in the community contributes to economic opportunities for local people. Subsidiaries give priority to recruitment of employment candidates and suppliers from the direct areas, and then from more wider areas. Fortuna also provide local small businesses with the potential to become suppliers.



CONTINUED

In 2021 Fortuna increased the percentage of employees from the direct areas to 43%. In 2021, the percentage of local suppliers decreased slightly from 2020. However, spending on local suppliers from the direct areas represented 4.85% of its total procurement spend, which is a slight increase from 2020 when 4.18% of total procurement was spent on local suppliers.

15% women employees, slightly below 19%

2021 target. 16% of women in

management positions

43.3%
of employees are from local communities

Social Investment

Fortuna are committed to working with community organizations, local governments and local suppliers to identify community needs and provide sustainable benefits to the communities in our direct and indirect areas of influence, while ensuring that financial contributions are used in an effective and ethical way to support outcomes-focused community initiatives, consistent with support for the UN SDGs.

The company establish formal sustainable development funding agreements with local authorities. In Peru, an agreement is focused on providing employment and training opportunities for local communities and strengthening the pipeline of local suppliers through courses, workshops, internships and scholarships.

Since 2014, Roxgold has implemented community investment programs, resulting into more than 150 projects in Bagassi area. In 2020, as per the implementation of a new mining code regulation in Burkina Faso, the majority of the Yaramoko mine site's community development has been led by local authorities through the contribution to the company to the Local Development Mining Fund (LDMF). Burkina Faso's new mining code requires that mining companies contribute up to 1% of their annual gross revenue to the LDMF: half 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, 60 infrastructure development projects are being sponsored by the Bagassi municipal council with funding from the LDMF.

These projects include: 24 educational facilities, 10 health promotion infratructure projects, 10 water and sanitation infrastructure projects, 7 economic development infrastructure projects and 7 community infrastructure projects.

Fortuna's community investments in 2021 totaled just over US\$5 million, of which 28% was invested in public social services, 18% in economic development initiatives, 15% in health, 6% in education, 13% in other themes and 21% was contributed to the Local Development Fund by Yaramoko.

Workforce Health and Safety

Mining is a high-risk industry. Effective management of occupational health and safety (OHS) prevents operational disruptions and loss of productivity, reduces regulatory compliance costs, fines, and penalties, and protects the Company's reputation, allowing it to attract and retain talent.

The OHS management system at each of Fortuna's operations is certified to ISO 45001 standard. In 2021, among employees and contractors, there were:

- · Zero fatalities from work-related injuries
- · Zero fatalities from work-related illnesses
- Zero cases of work-related illnesses

At the beginning of 2021 at San Jose, Fortuna observed an increase in the number of safety incidents. Accordingly, the company began to work hard at developing visible leadership, encouraging team work and adjusting individual behaviors.

Security and Human Rights

Fortuna faces the most significant exposure to security risks through its West African operations. The security situation in northern Burkina Faso is generally considered to be unstable and therefore there is ongoing assessment and adaptation of the security management system to ensure that we keep our employees safe. The security management system includes two key units:

- The unarmed operations unit whose role is to ensure the surveillance and security of the mine's assets
- The armed intervention unit, including the National Gendarmerie detachment that provides escorts for convoys outside the mine site and secures the site with pre-established site defense plans

There were zero confirmed cases of discrimination or violations of human rights, freedom of association, child labor, youth labor with exposure to high-risk work, or forced labor involving our employees.

- 100% of our internal and external security personnel received formal human rights training
- 67% of our employees received human rights training



Yaramoko Mine safety meeting

Business Ethics and Transparency

None of Fortuna's mines are located in countries posing the highest corruption risks. Fortuna are subject to laws that impose harsh penalties on companies and individuals for bribery and corruption. Additionally they must comply with the anti-corruption laws of the countries where they operate.

The company has an Anti-Corruption Policy, which is approved by the Board, addresses bribery, corruption, facilitation payments, gifts, and political contributions. All trade association memberships are disclosed. The company also operate a whistleblower channel for questions and complaints from employees and other stakeholders on potential violations of its corporate policies.

CONTINUED

In 2021, there were zero cases of corruption and zero political contributions.

Human Capital Management and Labor Relations

Fortuna conducted an employee satisfaction survey that is based on an internationally validated methodology, the Hay Group survey. Alignment to this methodology allows them to compare performance on employee satisfaction to global mining companies as well as other companies in different industries that operate within the same region as Fortuna. It also provides the company with detailed data on employee satisfaction in key areas and identifies opportunities for improvement.

In 2021, a survey was held at the Latin American operations only. The satisfaction rate was 69%, which is slightly higher than the mining industry average (68%). Other key findings include that 79% of Fortuna's employees from the Latin American operations believe that they have the support needed to succeed and are engaged and motivated. This is significantly higher than the mining industry average (50%) and above the regional average for all industries (64%).

Fortuna utilize an e-learning platform to deliver employee training, including regulatory, technical and management training courses.

4.85%
spending on local suppliers as % of total procurement

69%

satisfaction rate as measured in an employee survey in LatAm

In 2021, Fortuna hired 687 new employees at its LatAm operations, representing a total hiring rate of 32%. The hiring rate for women in 2021 decreased slightly from 2020, however, in absolute terms, they hired almost double the number of women in 2021 than in 2020.

Employee turnover rate for Latin American operations decreased in 2021 after increasing in 2020 for reasons attributable to the COVID-19 pandemic.



Latin American mine employees

Rights of Indigenous People

There were zero recoded cases of violations related to the rights of Indigenous peoples in 2021.



Women's community organization at Yaramoko

Supply Chain Management

Companies have influence on the environmental and social performance of their contractors and suppliers and may be held responsible for their actions by stakeholders.

Breakdowns in the supply chain for essential materials can shut down operations, and materials required for the extraction of metals and minerals can have significant environmental and social impacts for communities, workers and ecosystems. Effective management of the supply chain can prevent operational disruptions, reduce litigation and regulatory risk, build community relationships through local procurement, and protect the Company's reputation.

A significant part of Fortuna's operational workforce consists of contractors, who work closely with its employees. They also rely on suppliers for a wide range of goods and services.

An important aspect of supply chain is the sourcing and transportation of products and materials that require special handling, such as explosives, hydrocarbons, chemical reagents, cyanide, personal protective equipment and safety equipment.

Recently the government of Burkina Faso issued a new decree related to the regulation of local content purchases. This announcement was made in January 2022 and the West African operations are monitoring its implementation and the implications for operations and approach to local purchasing.

In 2021, Fortuna had 2,184 suppliers of products and services and 2,337 contractors. Subsidiary Procurement departments work with HSSE departments to evaluate the performance of contractors and verify compliance with expectations. In 2021, 2.31% of suppliers were selected in accordance with environmental criteria and 1.65% with social criteria at the Latin American operations.

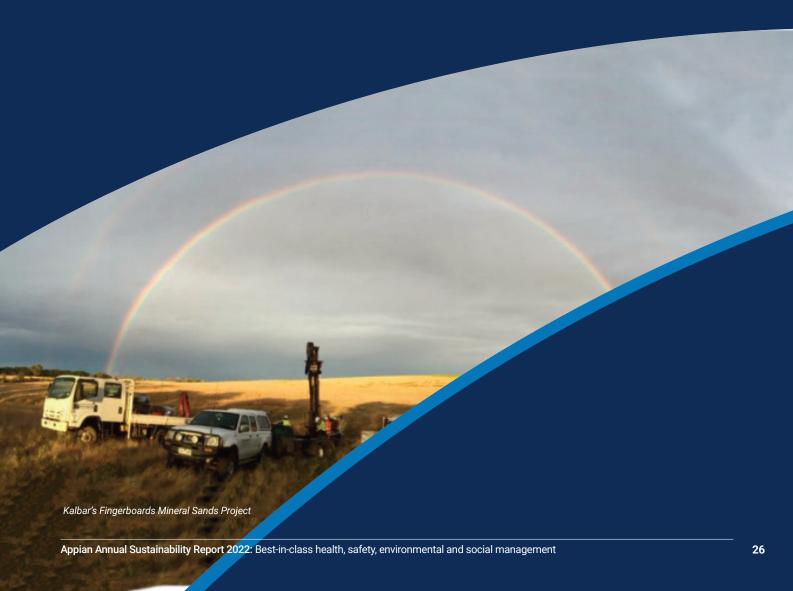
KALBAR OPERATIONS

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.







Environment Effects Statement

A 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, an Independent Advisory Committee (IAC) Panel hearing was conducted, while an in-person hearing was held in Bairnsdale from 28 June 2021 to 16 July 2021. Public hearings completed on Thursday 22 July 2021 with the IAC preparing their assessment for the Minister for Planning. The report needed to be submitted within 40 business days from the close of proceedings (late September 2021).

The Minister for Planning's assessment was published on 24 November 2021 and concluded that the project should be re-scoped.

There were some 43 recommendations from the IAC, and a number of studies have already been undertaken to address the concerns raised by the IAC, including a new mine starting location, changes to biodiversity impacts and fewer road moves.

Community

Kalbar will continue to engage and work with community and stakeholders affected by its operations, as it understands it is fundamental to the business.

Kalbar believes in being a good neighbour, addressing concerns and building positive relationships by working respectfully, collaboratively and transparently to earn the trust of all with whom they interact to maximise shared value.

Kalbar's social strategy includes the establishment of a Community Hub that will be situated in the Project area and will enable local community members and other visitors to see the Project, demonstrate the technical aspects of the mining operations, and understand the benefits to the wider community.

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.

Environmental

Kalbar is committed to providing responsible stewardship of the natural resources over which they 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.

- Undertake all necessary environmental assessments for operations and use the best available evidence to identify how to prevent, minimise, mitigate or remediate any harmful effects of operations on the environment
- Engage with stakeholders at the planning and every subsequent phase of operations to identify and manage environmental risk and identify opportunities to improve
- Ensure the efficient use of water, energy and other natural resources are embedded into operational practices with a focus to reduce waste and recycle as much as possible
- Rehabilitate and restore the land for agriculture and native grassy woodlands to provide net environmental benefits
- Focus on opportunities to use renewable energy or low carbon solutions to reduce greenhouse gas emissions where possible
- Respect that climate change is a shared global challenge and participate in solutions that address the physical impacts of climate change

WESTERN POTASH CORP

MURIATE OF POTASH, CANADA

Western Potash Corp ("WPC") is a long-life, low-cost MOP potash asset in Saskatchewan, Canada.

The company is building Canada's most efficient potash solution mine. Utilizing innovative selective solution mining technologies, Western plans to develop the world-class Milestone potash deposit in an ecologically sustainable, economically efficient and socially responsible manner.

In May 2022, Appian provided senior credit financing to fund the completion of construction and commissioning of the Milestone Project.





Western Potash Corporation was established in April 2017 with the acquisition of over 148,000 acres of Crown and Freehold mineral leases in Saskatchewan.

The company is building one of the most technologically advanced potash solution mines in the province of Saskatchewan, in a tier 1 mining jurisdiction. The Milestone Project is currently constructing Phase I in an ecologically sustainable, economically efficient, and socially responsible manner.

Western Potash Corporation has strong ties with the local community and has support from local and provincial governments.

Health & Safety

As part of the requirements set forth in Appian's loan documents, Western Potash hired Jinell Nixon as Health, Safety, Security and Environmental Supervisor. Ms. Nixon achieved her Health and Safety Administrator certificate in 2014, Worker Safety Management certificate in 2016, Occupational health and Safety certificate in 2017, became a Canadian Registered Safety Professional (CRSP) in 2018, and is also a certified trainer of Occupational Health and Safety Level 1, Level 2 and Supervision and Safety.

Western Potash maintains a coninuous focus on ensuring the health and safety of all stakeholders and adherence to all applicable regulations. Since restarting construction in June 2022, the Total Recordable Injury Frequency (TRIF) has been at zero.

To maintain a safe and healthy work environment for employees, management works diligently alongside internal and external 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

Western Potash Corporation is committed to respecting the natural environment, maintaining strong community partnerships, and putting the health and safety of its employees first.

Working proactively with all of the mine's neighbors is very important in ensuring that the development of the mine is a win-win venture for all stakeholders. Western Potash works with the community to foster direct and indirect employment. It is estimated over 40 jobs will be created for local workers during Phase I. In terms of local procurement, there will be opportunities for local and First Nations suppliers to participate.

- Economic impact: C\$80m+ of direct spending in local Regina economy
- Taxes and royalties: C\$15m+ per year of expected taxes and royalties to support province of Saskatchewan

Environmental Stewardship

During the construction and operation of Phase I, the company is committed to optimizing its water quality, energy efficiency and waste reduction. The mine's inherent design reduces impact to potable water usage, energy consumption, subsidence and surface disturbance, and produces less noise and generates fewer emissions than competing technologies.

Environmental benefits of the Milestone Project

The production of MOP is more environmentally sustainable than most nitrogen or phosphate fertilizers.

- MOP production emits substantially lower greenhouse gases (~0.16t CO₂e/t) than nitrogen (2.48t CO₂e/t) and other phosphate fertilizers
- Horizontal solution mining method uses saturated brine to extract potash, which means zero salt tailings on the surface
- Mining methodology requires approximately 50% less water when compared to a traditional solution mine
- Decarbonization could provide an additional tailwind to MOP demand growth

	Nitrogen fertilizer	Phosphate fertilizer	Western Potash Corp MOP
Production footprint	Terunzer	Tel tilizel	MOP
Low Scope 1+2 emissions (<100kg CO2e/t)	×	×	✓
Low water consumption (<1t/t)	×	×	✓
No tailings left on surface	×	×	✓
Consumption footprint			
Emissions in production and distribution	High	Medium	Low
No energy-intensive downstream processing	•	1	✓
No N2O/CO2 release on use	×	✓	✓
No risk to waterways	×	×	✓
Higher yields need less cultivated crop land	1	1	✓

The Milestone Project's Total Environmental Incident Frequency (EIF) is at zero since restarting construction.

Safe and secure supply of fertilizer is essential to global food security



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