



2021 SUSTAINABILITY REPORT

SOCIALLY RESPONSIBLE MINING



When we are able to balance the expectations of shareholders with the needs of our employees, our host community and the environment, all participants are able to share in the value that K92 delivers year over year. To achieve this harmony, we engage with all levels of government, operate ethically, create programs that support communities, and respect the land and the diverse culture of Papua New Guinea (PNG). As a gold mine operating in PNG, we approach all our activities through the lens of being socially responsible, which reminds us as well as our stakeholders that, beyond production, we are here to create jobs and build capacity and infrastructure, with the overall goal of sustainable economic growth for the communities surrounding the mine as well as for PNG more broadly.



TABLE OF CONTENTS

About K92 **3**

2021/22 Highlights **4**

Leadership Message **5**

Our Approach **7**

Our People **15**

Social Responsibility **22**

Environmental Stewardship **28**

Performance Data and SASB Content Index **35**

ABOUT THIS REPORT

This is K92’s third annual Sustainability Report, which provides an overview of how we manage key aspects of environmental and social responsibility, along with 2021 and 2022 performance highlights and key metrics from the SASB Metals and Mining Standard. This year marks the first time that we are also reporting disclosures aligned with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations. Sustainability data for our 2021 fiscal year (ended December 31, 2021) relates to all operations and activities and can be found on pages [35](#) and [36](#). Unless noted otherwise, financial figures are in U.S. dollars.

ABOUT K92

K92 Mining Inc. is engaged in the production of gold, copper and silver from the Kora and Judd deposits at the Kainantu Gold Mine in the Eastern Highlands province of Papua New Guinea, as well as exploration and development of mineral deposits in the immediate vicinity of the mine. The Company declared commercial production from Kainantu in February 2018 and is in a strong financial position.

The Stage 2 processing plant expansion was commissioned in late-3Q 2020 and run-rate was achieved in late 3Q-2021, doubling annual throughput to 400,000 tonnes. Following the strong performance of the plant, in October 2021 a Stage 2A Expansion was approved to increase annual throughput by 25% to 500,000 tonnes

and is expected to be commissioned in the second half of 2022, further driving economies of scale and strengthening the Company’s ability to self-fund the Stage 3 Expansion. The Stage 3 Expansion PEA (annual throughput of 1 million tonnes) was completed in 2Q 2020, outlining an average run-rate production of +315,000 gold equivalent ounces (AuEq). Economic studies are underway to support a Stage 3 Expansion Definitive Feasibility Study and concurrent Stage 3A Expansion PEA, with step-out drilling underway to support potential further expansions.

K92 is headquartered in Vancouver, BC, and trades on the Toronto Stock Exchange (TSX) as symbol KNT and the OTCQX as symbol KNTNF.



K92 is here to create jobs and build capacity and infrastructure, with the overall goal of fostering sustainable economic growth for nearby communities and for PNG.

- ◆ Exploration & Development
- ⚡ Past & Current Producer
- 💧 Hydropower Generation
- Principal Road
- ✈ Regional Airport
- 🚢 Port Facility

0 100 200 300 km

2021/22 HIGHLIGHTS

OPERATIONS

Record annual gold equivalent production of
104,196 oz

Stage 2 Expansion run-rate of 400,000 tpa achieved in late 3Q 2021; Stage 2A approved in October 2021 to

increase throughput 25% to 500,000 tpa

Commenced production

at the Judd Vein system, a new major mining front, just over a year after the discovery of high-grade mineralization underground

Increased Kora measured and indicated resources by +91% to 2.1 moz gold equivalent (AuEq)

with inferred resources at 2.5 moz AuEq, and delivered a maiden resource at Judd of 0.13 moz measured and indicated and 0.18 moz inferred in February 2022

SUSTAINABILITY

14% year-over-year increase

in corporate tax (i.e., second-highest taxpayer in the mining industry in Papua New Guinea)

One of the top safety records in the Australasian region with a year-over-year
LTI frequency reduction of 14%

\$0.9 million

in community investments in 2021

~50% lower carbon intensity

per gold equivalent ounce produced compared to global average¹

1 Based on S&P Global Market Intelligence 2020 data on a gold produced basis

LEADERSHIP MESSAGE



We're pleased to release our third **Sustainability Report**, which discloses K92's management approach and performance on the topics that are material to our business, and alignment to global frameworks for our stakeholders to compare our performance to our peers.

We recognize that climate change can pose risks to our business, and are taking steps to understand and manage these risks. At

the same time, we believe our company has many opportunities under a low carbon transition. As a result, in 2021 we started our alignment to the Task Force on Climate-related Financial Disclosures (TCFD), and developed a road map to further enhance our climate risk and opportunity management.

We continue to choose **Socially Responsible Mining** as our theme, as a purposeful reminder that at K92, we view our efforts in terms of our social, economic and operational commitments as priorities. Our success is dependent on how well we listen and respond to the needs of the communities in which we operate, and to PNG more broadly; increasingly as we work and live within these communities, we have a strong understanding of the types of programs that are needed and how to make them happen.

In October of 2021, as the COVID-19 Delta variant took hold in PNG, the Governor of the Eastern Highlands posted a video of the state of the Goroka Hospital. It was a tragic scene, which is the only way to put it. There was no ability for people to properly isolate in this region and therefore no way to try to slow down infections and fatalities. As it happened, there was a Board meeting the day that video was

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COVID-19 RESPONSE

Our responsibility to contribute to the health and safety of our host community and to PNG continued as the impacts of COVID-19 persisted. The following activities supported our COVID-19 response in 2021:

- Supported government efforts towards addressing COVID-19 at a national, provincial and local level through the \$450,000 COVID-19 Assistance Fund which included \$130,000 worth of COVID-19 health accessories to PNG's national government
- Funding of \$300,000 for the conversion of an existing structure into a COVID-19 Isolation Centre in the Eastern Highlands Province
- MOU signed with Eastern Highlands Provincial Health Authority to secure vaccines
- Conducted COVID-19 awareness and testing and administered vaccinations in the communities and surrounding area through our health team and in partnership with the provincial health authority, including a cash incentive program for full COVID-19 vaccinations

For information on COVID-19 cases and vaccination rates, please see the Health, Safety and Security section on page [16](#).



posted, and I proposed that we commit \$300,000 to support the Governor. The only question from the Board was if it was enough. In collaboration with the Governor, we quickly converted a facility and created the Goroka COVID-19 Isolation Centre, which could later be used for other purposes. Ironically, although I had recovered from my own recent bout with COVID-19, I was still testing positive on PCR and not able to board a plane, so the Governor asked me to officially open the centre, which I did, safely distanced from those who attended, including the Governor.

Our response to COVID-19 goes beyond supporting the community. It's also about how we managed to safely continue operating and thriving as a company. The level of commitment of our people, and to some extent, the risk they undertook to stay in PNG, the extended amount of time people stayed on site, and sense of teamwork was commendable. I know that this was also possible because of our culture of safety that we continue to work at every day; even with a workforce that has grown to 1,300, we have maintained our safety record as one of the best in the Australasian region.

While some community outreach was temporarily suspended in 2021, you will read about some of the important economic development programs that continued and grew over the year, including well-structured and attended community literacy training, a robust tertiary (post-secondary) scholarship program, business training and the Sustainable Livelihoods Agricultural Program. A number of projects that provided communities with access to potable water were also completed, a significant milestone for many people who now have water within their villages, instead of kilometres away.

Our engagement with communities in exploration areas improved over the last year despite the challenges associated with COVID-19: strong logistics and quarantine measures allowed us to proceed and, as a result, we successfully commissioned our expansion and have increased access to more areas. Further, we doubled the capacity and throughput of the entire operation in the midst of the pandemic, mostly through the efforts of our own people and contractors from within PNG. With record production, there was a record amount of tax paid to the government of PNG in the amount of \$13.0 million, which makes us the number two taxpayer in the PNG mining space. In a meeting with PNG's Prime Minister, Hon. James Marape, PNG's Mining Minister, Hon. Johnson Tuke, and Mineral Resources Authority MD, Mr. Jerry Garry, the Prime Minister described K92 as a "beacon of good corporate citizenship," in acknowledgment of our fulfilling our obligations of paying corporate income tax. We look forward to final approval, after the upcoming PNG election in July, of a tax scheme that will allow a portion of these taxes to go directly towards community programs and infrastructure like electrification along the roads we have built, which would further connect communities and enable access to more education and commerce.

This is an exciting time for K92. It's a period marked by growth and potential, both within our operations and for our host communities in PNG.

Thank you for taking the time to read this report.

Sincerely,



John Lewins
CEO and Director

OUR APPROACH

STRONG GOVERNANCE IS BETTER FOR ALL

As K92 grows, we recognize that improved governance will allow us to achieve more as a business for our stakeholders, including shareholders and the communities in which we work. In doing so, we can also have long-term impact on the economic and social development of Papua New Guinea.



OUR APPROACH

GOVERNANCE

K92's Board of Directors is accountable for the Company's sustainability approach and performance. The Board's Health and Safety Committee has specific responsibility for overseeing health and safety matters. The Committee is composed of K92's CEO, who is the Committee Chair, the SVP of Operations, and an independent director. The senior mining staff, composed of the General Manager of Kainantu Gold Mine and the General Manager of External Affairs and Sustainable Development, report to the Committee. The Chair of the Committee reports to the Board of Directors. In late 2021, the Environment, Health, Safety, Social and Sustainability Committee of the Board (the "ESG Committee") was formed, taking over for environmental matters from the Health and Safety Committee.

In 2021, the Company held six meetings of the Board of Directors, four meetings of the Audit Committee and four meetings of the Nominating and Corporate Governance Committee. Discussion topics included the review and approval of financial documents, AGM matters, adoption of new corporate governance policies, Board charters, executive and director position descriptions, composition of the Board and its committees, internal controls and mitigation of fraud.



BUSINESS CONDUCT AND ETHICS

Our Code of Business Conduct and Ethics (the Code) sets out our expectations for conducting business to the highest standards of openness, honesty and accountability. The Code applies to everyone working on behalf of our company, including contractors.

We also have a Whistleblower Policy for anonymously reporting any potential cases of financial irregularity, fraud or misconduct.

In 2021, we formalized the following policies that not only are aligned with our core values but demonstrate our commitment to act ethically across all touchpoints of our operations, including our supply chain, and communities in which we operate:

Anti-Bribery and Anti-Corruption

Our Anti-Bribery and Anti-Corruption Policy is in accordance with the *Corruption of Foreign Public Officials Act* (Canada) and the laws of other jurisdictions in which the Company operates or conducts its business. This includes, and is not limited to, those countries where the Company has offices.

The objective of the Anti-Corruption Policy is to provide a procedure to ensure that K92, together with its directors, officers, employees, consultants and contractors, conducts its business in an honest and ethical manner reflecting the highest standards of integrity and in compliance with all relevant laws and regulations applicable to it. According to the Anti-Corruption Policy, all representatives of K92 are not permitted to participate in bribery, kickbacks, facilitation payments, extortion or make political contributions on behalf of K92 without CEO or Audit Committee approval.

2021 saw the formalization of policies that are aligned with our core values and demonstrate our commitment to act ethically across all touchpoints of our operations, including our supply chain, and in the communities in which we operate.

Human Rights

Adopted in 2021, the new Human Rights Policy confirms our commitment to respecting the human rights and dignity of all individuals within our operations, supply chain, and communities in which we operate. We avoid contributing to adverse human rights impacts through our own activities and business relationships.

All of our personnel are encouraged and guided to conduct our business by heeding the following principles:

- Treat everyone with respect and dignity
- Foster a workplace free of harassment and discrimination
- Promote diversity and inclusion in the workplace
- Prohibit forced, bonded, trafficked and child labour
- Recruit ethically
- Provide fair wages and benefits
- Promote and protect health and safety in the workplace.



We ensure our suppliers, vendors, agents, service providers and contractors, including those tendering to do business with K92, have a clear understanding of our core values, how we expect to conduct our business with suppliers, and how we expect our suppliers to embrace our commitment to integrity.

Supplier Code of Conduct

K92 is committed to doing business in a legal, ethical and socially responsible manner, with core values of building a team-based culture of excellence that delivers sustainable value and growth. In accordance with those values, the Company has a Supplier Code of Conduct that is designed to ensure that our suppliers, vendors, agents, service providers and contractors, including those tendering to do business with K92, have a clear understanding of our core values, how we expect to conduct our business with suppliers, and how we expect our suppliers to embrace our commitment to integrity by complying with the standards of conduct within this code and communicating them to its employees.

Board Diversity

To ensure our Board is positioned to make the best possible decisions about matters that determine our success as a company, we aim for a Board composition that reflects a diverse mix of knowledge, experience, education, skills, gender, age and ethnicity. A new female Director now chairs the ESG Committee. As of the date of this report, K92 has 33% female representation on the Board.

For more information about our Board Diversity Policy, please see our website: <https://k92mining.com/about/#directors>

ESG AT THE BOARD LEVEL

In 2021, in order to enhance ESG standards at the Board level, the ESG Committee was established to provide oversight with respect to environment, climate change, health, safety, social, sustainability, and other public policy matters relevant to K92. This will ensure that our commitment to conduct operations with environmentally sound, safe, healthy, socially responsible and sustainable business practices is supported at the highest corporate level. The ESG Committee, which is comprised of four directors, three of which are independent, meets at least four times per year and reports to the Board.

The ESG Committee assists the Board in fulfilling its responsibilities relating to oversight and assessment of K92 with respect to the following:

- Responsible management of social and human rights impacts of K92's activities
- The contribution to the development of healthy communities and sustainable economic activities
- The protection of culture and heritage resources in the communities in which we operate
- Engagement, relationships and communication with local communities, governments and other organizations
- Compliance with applicable laws, regulations and policies relating to ESG
- Policies and practices regarding ESG, including staying apprised of changes that may impact our operations
- Our approach to ESG, ensuring we consistently exhibit and promote ethical, transparent, responsible and sustainable behaviours, and meaningful engagement with stakeholders

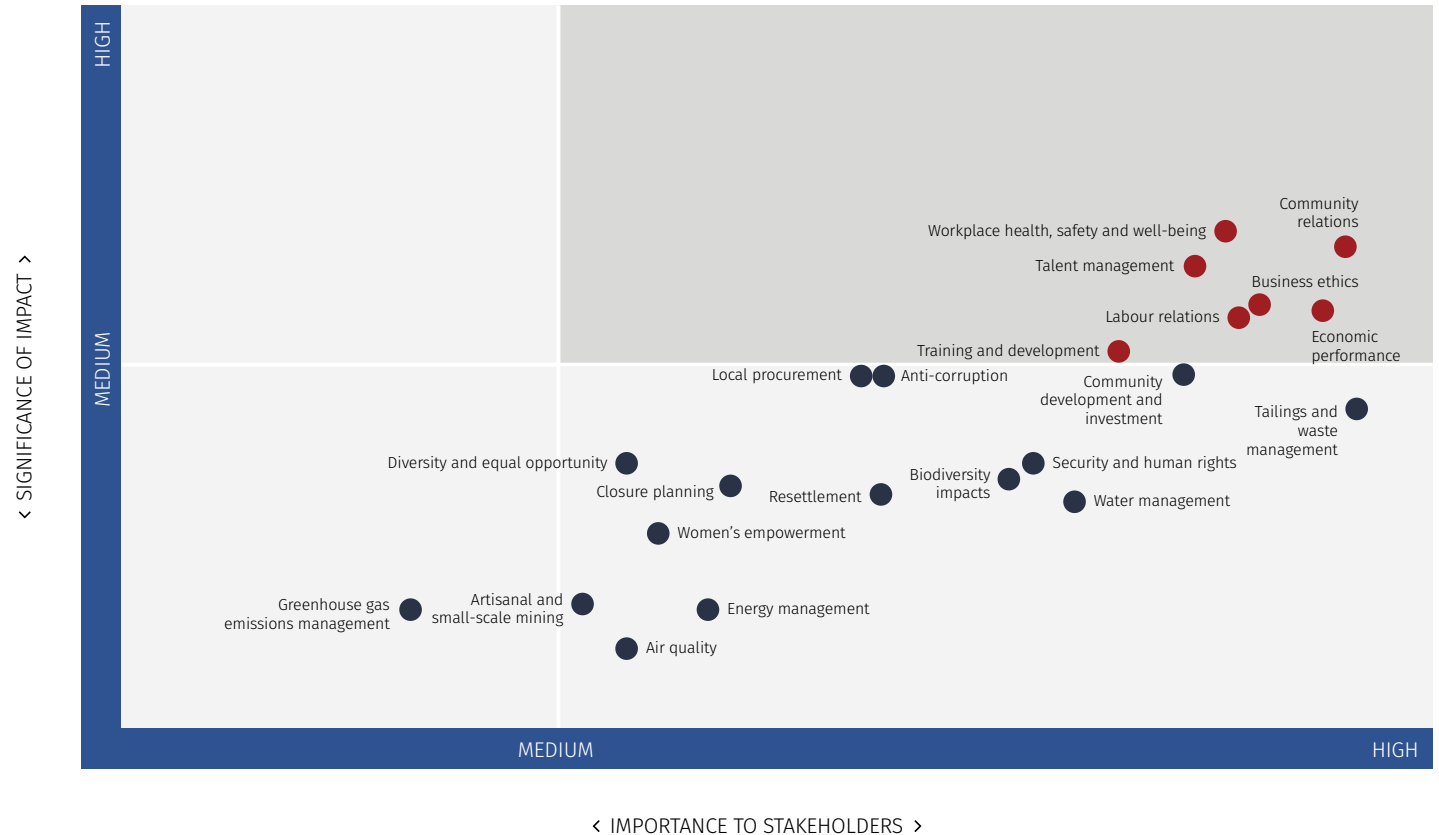
We recognize that continuous improvement is necessary to ensure we are operating with best practices in place and that we are prepared for any threats that could impact our business. In 2021, the following activities took place:

- An assessment of physical and transition climate risks and opportunities was conducted by WSP, a leading consultancy
- An inventory of our greenhouse gas emissions for 2020 and 2021 was also conducted by WSP, to better ascertain our impact and areas for improvement
- We designed, tested and documented 100 internal controls over financial reporting to prevent fraud and mismanagement
- Laurel Hill Advisory Group was engaged to conduct a review and provide recommendations to improve our corporate governance and executive compensation practices, and provided advice on the development of a shareholder communications strategy

For more information about our governance practices, please see our [2022 Management Information Circular](#).

OUR PRIORITIES

In early 2021, K92 completed its first materiality assessment to identify, prioritize and validate the topics that matter most to our business and stakeholders. This exercise guides our short- and long-term environmental, social and governance (ESG) strategy.



Facilitated by a qualified third-party organization, the materiality assessment process included three steps:

Identification: A spectrum of issues was identified through desktop research of peer practices, ESG rating agencies and ESG frameworks, and further refined through internal interviews with K92 management.

Prioritization: Issues were prioritized through surveys developed to gather internal and external stakeholder insights relating to K92's properties, performance and impact, and interviews with select survey participants to gain further context in areas where K92 can improve its approach and outcomes.

Validation: The final list of material topics was validated by the K92 executive/leadership team during a working session with subject matter experts and executives, and a road map was drafted to identify immediate and mid-term steps to strengthen ESG governance, measurement.

ALIGNMENT WITH SDGs

The **UN Sustainable Development Goals** (SDGs) are a call for all countries to work together to end poverty, protect the planet and improve the lives and prospects of everyone, everywhere. Aligning our priorities and efforts with a globally recognized framework is instrumental in helping us to establish commitments and operate in a manner that benefits all stakeholders, including our communities, governments and investors.

We believe that our greatest contribution towards the SDGs is achieved through K92 community projects and activities that not only improve quality of life in those communities but also lead to residents acquiring valuable skills for life beyond the mine.

K92’s community projects focus on the following SDGs:



STAKEHOLDER ENGAGEMENT

Engagement with communities near the mine site, all levels of government and landowners, is a critical component of operating in PNG. Through timely and culturally appropriate communications, we are able to understand the needs of our stakeholders and deliver meaningful programs that have a long-lasting impact.

In-person conversations and events, email, social media and our online K92 News and Development Magazine are some of the ways in which we inform and initiate dialogue with community members and local and national officials. For emerging issues of great importance, from time to time, we will provide printed communications in both “Tok Pisin” and English for our local communities.

GOVERNMENT AND REGULATORY ENGAGEMENT

K92 continuously engages with PNG government leaders on a national and local level. In 2021, discussions included COVID-19 support, the proposed new Mining Act, mining and exploration licence renewals and the MOA.

The signing of the Memorandum of Agreement (MOA) experienced further delays outside the control of K92 or the Bilimoia Interim Landowners Association (BILA). In part, this is attributed to the COVID-19 pandemic and also because 2022 is an election year in PNG with, quite understandably, a focus on the democratic processes in the country.

Our projects such as those with schools and communities, in areas such as training and local procurement that have a social impact, are consistent with the aims and goals of the MOA, which governs how we operate as a company and how we interact with our communities, so it is our hope that the MOA will be signed immediately following the election. Further, a 5% total interest in the mine will be available for divestment to local landowners and the Eastern Highlands Government; however, this benefit too is only possible after the signing of the MOA as the parties that are beneficiaries of these funds will be different compared to the previous MOA.

Separate from the MOA, but also pending, is the approval of the tax credit scheme that would see even more funds allocated towards projects in communities in the Eastern Highlands or the Kainantu area.

The Conservation and Environment Protection Authority (CEPA) is the PNG Government’s environment regulatory department that ensures natural and physical resources are managed to sustain environmental quality and human well-being. They conduct mine site visits twice a year for regulatory inspections to ensure the K92 mine is compliant with environmental permit conditions. COVID-19 greatly impacted their travel in 2021; however, communication was maintained through email and phone between CEPA officers and relevant K92 management, and visits were reinstated in 2022 with an inspection of the Tailings Storage Facility (TSF) expansion in 2022.



We are able to understand the needs of our stakeholders and deliver meaningful programs that have a long-lasting impact through timely and culturally appropriate communications.

COMMUNITY ENGAGEMENT

Given the COVID-19 restrictions, direct engagements with village communities were limited in 2021; in order to have some continuity, we met with community members in our Kainantu community office where the number of people who are present as well as distancing could be managed. Discussion topics included access for exploration work, business support opportunities for communities, employment opportunities, as well as listening to and managing the myriad business ideas of members. We take care to approach communication in ways that are culturally appropriate, from issues that arise in our operations, to those that relate to complex clan dynamics in the community, ultimately maintaining the health and safety of all and our social licence to operate.

The development of our local radio station, Radio K92 FM, is in progress. We anticipate that this will be a good communication tool for timely and accessible information and news. We expect to be on-air in 2022.



LOOKING FORWARD

As we look towards expansion and furthering our efforts in the communities in which we operate, we recognize the importance of taking a disciplined approach to governance and will continue to monitor our evolving ESG practices and strive to achieve the highest standards. We plan to accomplish the following governance enhancements in 2022:

- Adopt an Environmental Policy
- Increase Board oversight and understanding of ESG
- Recommend director education and workshops focused on ESG
- Continually improve disclosure of ESG oversight and promote good governance
- Ensure disclosure is aligned with Canadian Securities Administrator (CSA) requirements and the Task Force on Climate-related Financial Disclosures (TCFD) recommendations
- Enhance disclosure of ESG KPIs and include them in the annual proxy information circular
- Establish Climate Change Targets and Goals

With the expansion of our business, we will take an increasingly disciplined approach to governance and evolve our ESG practices to achieve the highest standards.

OUR PEOPLE

SUPPORTING OUR WORKFORCE

In order to build a community of skilled workers that can grow with us, we have taken steps to strengthen the ways in which we manage and empower our workforce. New senior team members and new processes and procedures are all in the interest of ensuring our people are protected and supported in their roles. This includes providing opportunities for economic and personal growth for our workers as well as for their families.



OUR PEOPLE

HEALTH, SAFETY AND SECURITY

The health, safety and security of our employees is a top priority for both the protection of our employees and to ensure our success as a business. Rather than a rules-based practice, we aim to create safety as a culture with tried-and-true systems in place, reinforcement of these systems and continuous improvement. Despite a significant increase in the workforce, our safety record remains the same and one of the best in the Australasian region.

Our health and safety management system and procedures are based on ISO 45001 and OHSAS 18001 standards. Safety training is ongoing and includes pre-start and toolbox talks, stop-work meetings if necessary, safety alerts via notice boards and emails, contractor meetings, recognition of safety champions and leaders, and activities initiated by the joint Occupational Health and Safety (OHS) Committee.

Our Health, Safety and Environment management standards and documents went through a review process in 2021 with high-level document reviews performed on the Health, Safety and Environment Policy, and the Fitness for Work Policy.

Taking the following steps to formalize Health and Safety Committee meetings in 2021 encouraged a more structured approach to overall health and safety governance from an organizational perspective:

- High-level meetings and including Company directors in meetings
- Documenting meetings and posting discussion notes publicly to help establish a disciplined process and transparency for external stakeholders
- Regular reporting to the Board about on-site health and safety meetings

JOINT OHS COMMITTEE

Our joint OHS Committee, composed of safety representatives from each department, meets quarterly to discuss current issues, improvement ideas and training needs. The committee also spearheads education campaigns, offering health and safety tips that apply not only to the workplace, but to workers' homes and communities as well.

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MANAGING COVID-19 ON SITE

In 2021, the COVID-19 pandemic impacted the mobility of our workforce through various lockdowns and safety measures; however, following protocols allowed us to successfully manage the containment of COVID-19 to ensure the good health and well-being of our people. We maintained 164 days COVID-19-free on site prior to the Delta outbreak in September 2021, which resulted in 126 positive cases, two of which required oxygen for a short period.

By end of December 2021, 46% of the K92 workforce was fully vaccinated while a further 24% had at least one vaccination. By April 2022, the employee vaccination rate was 59% fully vaccinated and 74% having at least one vaccination.



We engage in three different levels of risk assessment: a review of the brief individual risk assessment is undertaken to reflect the work environment and the people using it before embarking on a task; job safety and environmental analyses, which document the risks associated with specific activities and the measures to be put in place to control them; and formal risk assessments involving representatives from multiple departments for higher-level risks.

To further protect workers' health, we operate a modern underground mobile equipment fleet fitted with advanced scrubbing systems, which improve air quality by removing particulate matter. We also have modern refuge chambers for use during emergencies underground.

Employees in 2021 were extensively trained in Health and Safety to drive a culture of safety. Some training was standard competency training on equipment; however, there was a considerable amount of "refresher training" such as vehicle operator workshops through the OHS department, delivered on a monthly basis, with plans to be ongoing.

In 2021, we recorded a lost-time incident (LTI) when an underground operator went down a stope with a loader and sustained injuries. While the investigation could not confirm the cause of the incident, metal stop blocks were installed to cover the floor and wall surfaces of this and other similar areas to prevent any further occurrences. A general inspection occurs in advance of using these blocks.



We aim to create a culture of safety with tried-and-true systems in place, reinforcement and continuous improvement. Despite a significant increase in our workforce, our safety record remains the same, and one of the best in the Australasian region.

We continue to invest in educating employees about hygiene as well as prevention measures for typhoid and malaria, to mitigate the rate of infection that occurs on site and when employees return home.

SECURITY

Maintaining the personal safety of our people is an ongoing priority. To improve the quality of security in our camp and at various sites, in 2021 we engaged a global security firm with an outstanding track record, and have an agreement with the Royal PNG Constabulary, which are the Provincial police, who will provide policing on site for boosted security. We also work with a mobile squad, who also provide police services to the surrounding communities, and have assigned a number of officers to the exploration site that is operating separately from the mine. Additionally, we enhanced our physical security systems by installing facial recognition gates and expanding our security fences.

Artisanal and small-scale mining (ASM) is closely monitored and often detected around exploration sites in areas of higher geologic importance. We hope to have increased support from all levels of government and authorities before it develops into a larger issue, posing safety risks like injuries or death as a result of landslides and collapses. We hope to obtain this support in 2022 and conduct ongoing training to raise awareness about the safety implications of illegal mining to keep our people, as well as those in the community, safe.

Overall, we will continue working with local-level government and authorities, taking a holistic approach with the community to help address emerging conflicts and build trust so that peace and order, and ultimately the safety of all involved, can be preserved in the area surrounding the mine site.

DIVERSITY AND INCLUSION

In 2021, we created the Diversity and Inclusion Policy to formalize our stance on the kind of culture we want to create and what is expected by our people. Under this policy, we confirm that we embrace differences in age, ethnicity, sexual orientation, marital status, learning and thinking styles, physical and mental abilities, socio-economic class, education, life experiences and other dimensions of individuality.

We seek to implement the principles of diversity and inclusion every day through the following:

- Using respectful language and behaviour towards employees, contractors, customers and communities
- Acknowledging and proactively addressing our personal biases and discomforts
- Creating recruitment programs targeting our local and surrounding talent pool
- Providing scholarships, employment and mentorship opportunities to individuals from underrepresented backgrounds
- Requiring ongoing professional development to enhance diversity training and cultural awareness among management and staff
- Rewarding excellence and promoting employees objectively, based on performance and deliverables

Further, all employees and contractors are held responsible to treat all peers and stakeholders with dignity and respect. Behaviour that propagates violence, racism, sexism, discrimination, or any other willfully divisive act will not be tolerated. We encourage all incidents that breach this policy to be brought to the attention of management.

EMPLOYEE ENGAGEMENT

Our aim is to effectively manage the direct relationship with our employees to ensure we provide a safe and positive working environment compliant with the laws of PNG. K92 continues to directly engage its workforce through in-person communication and using internal communication tools. The majority of internal communication in 2021 was aimed at onboarding information for new employees and COVID-19 pandemic awareness, which also included various sessions held by the COVID-19 Medical Team.

It is important that we acknowledge and celebrate culturally important public holidays like Independence Day or World days to increase awareness in PNG about topics that are increasingly relevant to all. World Environmental Day in June 2021 was one of these occasions. With the theme, “Ecosystem Restoration” K92 hosted the following activities involving employees and the local communities:

- Planting of trees along the Baupa creek to demarcate 100-metre buffer zone
- Tree seedling distribution to schools within the impact area

TALENT MANAGEMENT STRATEGY

Our approach

At K92, we are excited about our future and the opportunity to grow PNG talent. We are committed to getting the right talent engaged and helping them grow so they can achieve their maximum potential while advancing their career. Through our scholarships, graduate and industrial trainee programs, apprenticeships and internal development programs, we are investing in PNG talent development programs that will allow for succession into critical roles, the creation of a sustainable end-to-end talent pipeline and long-term economic benefit for local people and PNG.

We are proud that almost all K92 employees are PNG nationals, with the majority coming from local communities. In 2021, out of 873 employees and 410 contractors, 95% of employees were PNG nationals and 5% were expatriates. 98% of contractors were PNG nationals.

Due to increased production, in 2021, our workforce increased by 30% with the addition of 264 employees and 34 contractors. Under the MOA, K92 is committed to maximizing employment opportunities for PNG nationals, with a major focus being on opportunities for our host communities, followed by residents of Eastern Highlands Province.

For specialized skills, we typically recruit from Kainantu Town, which is the local government centre, from the wider Eastern Highlands Province and from across PNG. Expatriates, who make up about 5% of our workforce, are mainly in senior management, highly specialized and trainer roles. While PNG nationals already occupy several senior management positions, our goal is to increase the presence of both males and females at this level over time, as we support more and more locals in developing the necessary management and technical skills.

Recruiting the best talent in PNG

At K92 we are excited about our future and the opportunity to grow PNG talent, and we are committed to hiring the right talent and helping them expand their capabilities, reaching their maximum potential while advancing their career.

Investing in PNG talent development programs through our scholarships, graduate and industrial trainee programs, apprenticeships and internal development programs are all key components of a well-rounded and end-to-end talent pipeline.

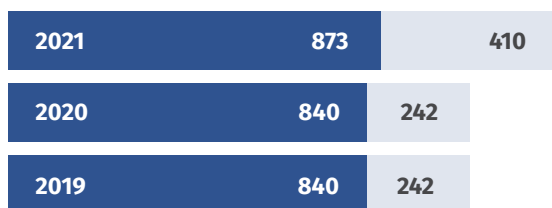
Universities are an important part of the talent strategy. K92 is a sponsor of the PNG University of Technology in Lae and the University of Papua New Guinea in Port Moresby and offers the K92 Tertiary Scholarship Program, which consists of full scholarship support for final year students in the fields of Mining, Geology and Mineral Processing, and was expanded in 2022 to include a Women in Mining scholarship. The other stream of professional talent is via the Community Bursaries and Scholarships. People in these groups are potential employees in roles that include engineers and geologists, as well as being future leaders of the country, so our view is that cultivating this talent pool benefits everyone.

Industrial Traineeship Program

Following the temporary suspension of the K92 Industrial Traineeship Program due to the COVID-19 pandemic, K92 has re-commenced the program. Towards the end of 2021, as quarantine mandates eased, students in their third or fourth year at either the PNG University of Technology in Lae and the University of Papua New Guinea in Port Moresby were engaged as trainees in the disciplines of Geology, Mining Engineering and Mineral Processing. A total of eight trainees participated in 8-16 weeks of intensive programming that started in September 2021.

Total number of employees and contractors in the workforce

(NUMBER)



EMPLOYEES CONTRACTORS

Representation of PNG nationals and international employees in the workforce

(PERCENTAGE)



NATIONAL INTERNATIONAL

The K92 Graduate Program is a 2-year program that follows the Industrial Training Program and funnels directly into the recruitment for K92 employment in professional roles.

Skills training and development

Developing skills is essential from a business perspective and K92 also recognizes its responsibility to support the development of the people of PNG and provide the opportunities for shared value. As we expand, we will require longer-term strategies such as looking at opportunities to help youth finish high school, developing a path for mature locals, expanding scholarships for education programs that would address specific roles in the mine, and providing more formalized mentorship and management training opportunities.

As we move forward in recruiting and developing local talent, we also want to be mindful that we are doing more than training people technically, and that we need to conduct our efforts in ways that respect the different cultural aspects of the people of PNG and include skill building for life outside of work as well.

Due to COVID-19 restrictions in place, all skills development training in 2021 had to be completed internally and in house. This included on-the-job training for various operators including Processing and Mining as well as Safety Training.



K92 employees and contractors are offered business training through the same Business Skills Training program that is offered to Impacted Landowners (Landco) and other existing business owners and directors. In 2021, 195 male and 33 female employees and contractors completed training in topics that included personal development courses, induction, bookkeeping and compliance with the Investment Promotion Authority and the Internal Revenue Service government agencies.

Labour relations

In 2021, K92 became a member of the Employer Federation of Papua New Guinea, an independent Employer Organization that provides advocacy and advisory services on labour and industrial relations in PNG.

The following are additional 2021 labour relations updates:

- No strikes or lockouts in 2021
- Formal Workplace Grievance and Complaints Procedure process was implemented
- Employee Records Procedure was formalized to protect confidential and private information of employees
- K92 involvement in culturally important public holidays or World days

At K92, we are excited about our future and the opportunity to grow PNG talent. We are committed to getting the right talent on board and helping them expand their capabilities and reach their maximum potential while advancing their career.

LOOKING FORWARD

In 2022, we look forward to increasing employee training opportunities with targeted programs and we will continue to strive to hire local talent. We also hope to recruit more women and expand business development opportunities for women in our communities.

CASE STUDY

DIVANNA UMPAO: DELIVERING SDG #4, QUALITY EDUCATION

Originally from Doyanankenu village, Kofenantun clan, Divanna Umpao is a member of K92's External Affairs and Sustainable Development team. After her early education at numerous schools across PNG's mainland, Divanna attended Pacific Adventist University and completed a Bachelor's degree in Arts, in the School of Humanities, Education and Theology, with majors in English and Geography, a minor in History, with an elective in Business. After graduating in 2019, Divanna returned to Kainantu where she volunteered to teach phonics to children in her paternal village and then taught Grade 9 and 10 English classes at Kafetina Secondary School.

In 2020, Divanna approached K92 Mining and offered to teach English and Tok Pisin. She has become not only a teacher, but an integral part of the K92 Mining Adult Literacy program that saw close to 100 students ranging in age from 21 to 75 years old graduate in 2021.

Divanna's talent and commitment are empowering people of the community through literacy. Literacy enables people to develop life skills, broaden their perspectives and opens doors to new opportunities. Most of the students in the adult literacy classes are women; providing reading and writing skills offers these women a new dimension in their lives which are largely directed by their place in a patrilineal and patrilocal culture. Perhaps for women, literacy is also a step towards their increased participation in PNG society and seeing new possibilities for their lives and the lives of their families.

Please see the Communities section of this report for more information on the K92 Mining Adult Literacy program, a key community investment initiative.



Divanna's talent and commitment are empowering people of the community through literacy.

SOCIAL RESPONSIBILITY

SUPPORTING OUR COMMUNITY

We invest in programs and infrastructure to help build healthy, resilient and self-sufficient communities. Improving the quality of life of landowners, their families and the generations that follow is the foundation of Socially Responsible Mining.



SUPPORTING OUR COMMUNITY

COMMUNITIES

By engaging with the community and supporting programs to strengthen foundational skills such as literacy, business development and farming, K92 can help these capabilities to work cooperatively, building resiliency and self-sufficiency for livelihoods independent of the mine. Our financial support helps build infrastructure like roads and bridges, ensuring these programs can operate effectively and that communities are safe and connected, enabling further opportunities for economic development in the area.

In 2021, we invested \$0.9 million in local communities, contributing to the development of a healthy ecosystem, and enabling sustainable revenue-generating capabilities for our host communities and local resources for the mine. This investment in local communities was lower than projected due to constraints related to COVID-19 and inter-tribal disagreements in the community, both of which caused interruptions, and ultimately the suspension of projects. Initiatives were restarted in 2022.

Our second annual total payment of corporate tax to the PNG government in 2021 was \$13.0 million, making us the second-highest taxpayer in mining in PNG, approximately three years after declaring commercial production.



COMMUNITY RELATIONS

Without a true understanding of the needs of communities and how they function, meaningful investment would not be possible. In an area where there are complex tribal and clan relations, understanding the communities and their structures is critical. In an effort to be transparent and inclusive and to avoid misunderstandings or feelings of exploitation that could strain relations, we ensure that communications with this stakeholder group are managed carefully and considerately.

Our 40+ person community affairs and sustainable development team, which includes our Vice President External Affairs, continues to bring to life our commitments to our host communities, going above and beyond the requirements of our MOA. Composed of experienced community relations practitioners, the team also includes eight village-based liaison officers who help us understand the pulse of the community, and six women in specialist roles focused on empowering women, promoting agricultural production, teaching English and running the Bilimoia health clinic.

K92 helps communities build resiliency and self-sufficiency – from funding vital infrastructure like roads and bridges to creating programs that teach sustainable agriculture, English and business skills.

SUSTAINABLE AGRICULTURE

K92's Sustainable Agriculture Livelihoods program expanded in 2021. Participants gaining local knowledge of gardening that includes soil science and new crop introductions in the Pomasi and Markham Valley grew to 100 farmers, of which approximately 80% are women. The women are already actively earning income from the vast array of produce they grow, including onions, tomatoes, carrots, eggplant, beans, pak choi, chili, lettuce, bananas, pumpkin, aibika, watermelon, round cabbage, paw paw, corn, taro and broccoli. Also in 2021, K92 committed \$300,000 to establish a new market complex in the town of Kainantu where the produce that isn't being used for household use can be bought and sold.

Beyond the many hours of hands-on and in-class instruction to facilitate personal food production, business skills like bookkeeping are provided to prepare participants for Joint Ventures (JVs). The Sustainable Agriculture program has already started to supply food for the K92 mess hall, as well as for sale in other local markets and those farther away in Lae city.

On the recommendation of K92's agricultural consultant, who recognized the soil's potential for bulb onions in the Sakimaniap area, and after a successful trial of the crop, K92 funded a solar-powered bulb onion dryer for the farmers in this Markham Valley area. The area is now benefiting from the income generated from the sale of the onions to K92 and is looking to expand their production and distribution.



UNDERSTANDING THE NEEDS OF COMMUNITIES: SUSTAINABLE LIVELIHOODS SURVEY

In 2021, COVID-19 was significantly impacting local communities so we suspended the Sustainable Livelihoods Survey, a survey that documents and models the various forms of capital and assets that communities have in place and identify those that are underutilized or those of which they may not even be aware. We are hoping to re-start this work in 2022.

A COMMITMENT TO EDUCATION

In recognition of the importance of education in our sustainability goals and the country, we continue to build out programs that benefit students of all ages. Our efforts range from teaching basic business skills and improving women's literacy levels on a local level, to building and refurbishing schools and funding post-secondary education scholarships. Continued investment in education drives long-term economic development for PNG as well as opportunities to foster and train potential talent for our operations. We also recognize the importance of early years schooling and provide financial support with fees for primary education; however, due to COVID-19 schools were largely unattended in 2021 so this initiative will probably re-start in 2022 and initial steps are underway to determine how to calculate the distribution of funds.

“Our next phase is to increase bulb onion and other produce output so we can reach other customers. The solar dryer will ensure our bulb onions meet the standard and quality local and international retailers seek. This is just the beginning of our journey to commercializing produce from this project. We have all the faith and confidence that we will achieve something big here: we are only in the trial phase, but the land is suitably fertile, the community united, and K92 Mining and other stakeholders are supportive. This is the perfect recipe for success.”

– MS. JOY JACK, K92 COMMUNITY DEVELOPMENT PROJECTS OFFICER

In 2021, K92 provided tertiary (post-secondary) scholarships, covering half of the fees to 48 qualifying students from host communities, which amounted to a contribution of PGK 160,074 (USD \$46,000). Three additional scholarships are awarded annually for the best performing students from different parts of the country on the recommendation of the various institutions. Our contribution for these three scholarships covers tertiary fees, boarding fees, books, pocket money and flights home.

K92 Scholarship in Mining Engineering – Dino Kara – winner of the Philip Jossie Medal

K92 Scholarship in Mineral Processing – John Lepus – winner of the Nicholas Peter Medal

K92 Scholarship in Geology – Ephraim Nick from Goroka in the Eastern Highlands – winner of the Trotsky Benjamin Medal

Our long-term relationship continued with the Department of Mining Engineering at the University of Technology in Lae and encompasses areas of mutual benefit including financial support for the university, work experience for students and undergraduates, and technical cooperation and project generation. K92 also provides annual prizes for the top third-year students in Geology, Mining and Metallurgy nationally, with recipients receiving substantial scholarships to help pay for their final year. In 2022, K92 expanded the program to include a Scholarship for Women in Mining.

Other K92 initiatives related to education that launched in 2021 include the following:

- Facilitation of a donation from Rotary, Australia of 500,000 books for schools in the area. Distribution is still in progress and will continue throughout 2022.
- Extension and repair of the library for the Kainantu Technical Secondary School that serves the young people of the region, completed in March 2022, and will be the beneficiary of a large percentage of the Rotary-sponsored books.
- Development of a sports mentoring and personal coaching program in Kainantu District through the engagement of a public figure who is well-known and trusted by the people of PNG.

We aim to expand our efforts through a longer-term strategic plan for our impacted communities and the wider area, which would include engaging with provincial governments; continued funding for school fees, scholarships and resources such as books; and establishing baseline data so that we can identify the effectiveness of our programs and where more focused efforts are required. Within 10 years, K92 wants to ensure all children in our communities have opportunities to finish primary education, giving kids the best possible start.

INFRASTRUCTURE INVESTMENT: DISTRICT ROADS UPGRADING

From mid-2020, K92 rebuilt the road from Aiyamontena to the Unantu Bridge. Completed in 2021, this required building three bridges in addition to associated road work. Construction of the road from the Unantu Bridge to Bilimoia is in progress and will eventually be extended to link Bilimoia 1, 2 and 3. Although this is a government and not a K92 responsibility, we recognize that providing infrastructure which can withstand the heavy rainfalls experienced in the region – in order to connect communities, improve mobility and therefore commerce – is in the interest of everyone who lives and works in the area. The K92 investment estimated for road work in 2022 is approximately PGK 3.5 million (USD \$1.0 million).

JOINT VENTURES, LOCAL PROCUREMENT AND ECONOMIC DEVELOPMENT

Since the beginning of K92 Mining's tenure at the Kainantu Mine, 63% of its total expenditure has been with PNG suppliers of goods and services. This reflects our commitment to the development of sustainable long-term businesses owned by local landowners, and we are very proud to have been part of the development of multiple local landowner businesses that supply and support the Kainantu Gold Mine.

We prioritize local suppliers and facilitate the creation of local landowner businesses to support the mine through joint ventures (JVs). JVs are designed to operate for the long term, set up so that the local landowners eventually own the equipment and gain experience from established supplier partners as a way of positioning them for future growth, including ventures beyond the mine.

K92 has created multiple JV business opportunities, including four major JV contracts between the communities and PNG companies for the provision of services, as well as numerous smaller contracts with local communities. The major contracts include Catering and Camp Management, Security, Road Transportation and Ancillary Mobile. In 2021, these contracts earned \$15.5 million supporting the local community.

BUSINESS SKILLS TRAINING

For K92 to work with more JVs and procure goods and services from our local communities, a greater understanding of business skills was required to ensure the success of these ventures. Training is available for landowners who want to do business with K92, and those who wish to further their education, in areas such as literacy, numeracy and a range of business topics, including bookkeeping, proposal writing and government and legal compliance. These community activities are also outlined in the Kainantu Mine MOA. In 2021, K92 invested \$13,600 in the following business training for 489 Impacted Landowners (Landco) and community members:

- Advanced training – For Landco and other existing business owners/directors, training includes basic business skills that is directed at the Landco Boards and the people associated with the organizations that represent the interest groups within each community such as women’s groups. Further, these participants are instructed in what the law expects of them as people representing their communities.
- Unlimited Possibilities training – A self-development course designed to help individuals, parents and household heads reorganize their lives in a way to ensure they are able to survive and thrive in a modern, multi-dimensional society given the significant changes in PNG over the last decades. It provides attitude and practical business training for setting up local businesses where participants live.



- Blended training – The Business Development Office goes into a community and teaches one or two basic business skills, such as proposal writing, at a time when people demonstrate an interest in business. Most of these attendees have already participated in the Unlimited Possibilities course.

COMMUNITY HEALTH

Through our Health Team, we have established health clinics in the community and provide the training needed to operate them. We also invest in educating employees about hygiene as well as prevention measures for typhoid and malaria to mitigate the rate of infection that occurs on site and when employees return home. In 2021, we invested approximately \$12,000 towards improving health clinics in the area. The funds went towards various medical clinics for different purposes including staffing a medical clinic with a nurse, medications, solar lighting, refrigeration and refurbishments and repairs.

We recognize the need to continue to make investments in community health, women’s health and domestic violence reduction initiatives in PNG. In 2021, we donated \$29,000 to Femili PNG, an NGO that works with clients, partners and communities to improve responses to family and sexual violence through case management, partner support, training, monitoring, research and advocacy.

Business and personal development courses for landowners and other community members offer training that helps these individuals thrive in a multi-dimensional society.

LOOKING FORWARD

In 2022, and as COVID-19 restrictions ease, we look forward to greater involvement in and development of skills in sustainable business and uninterrupted training across all instructional programs. Additionally, we will prioritize the following initiatives:

- Partnering with appropriate NGOs for design and delivery of sustainable services
- Facilitating additional JVs that can provide income for members of the community and local goods and services for our operations
- Expanding our literacy program to make it available for all of our communities
- Provision of infrastructure that can be sustained and maintained independently by local communities
- Improved health for as many as possible through clinics, lifestyle changes and more abundant self-grown foods

CASE STUDY

ADULT LITERACY PROGRAM

K92 Mining's Adult Literacy Program has been in operation since late 2019 and is one of K92 Mining's many sustainable development programs in the area. In 2021, 96 students ranging in age from 21 to 75 years old from Bikupimpa and Punano villages in the Kainantu district, graduated from the program in a ceremony witnessed by local level government and district representatives, community leaders and K92 representatives. K92 views literacy as an essential part of our local investment and a key component to sustainable development. "Without reading, you don't have education, and without education, you don't have sustainable development," said Mr. Jim Kia, K92 Mining's Community Affairs Manager.

Although the pandemic delayed many programs in the Eastern Highlands, the two K92 Mining teachers continued to run the program from, or close to, their homes. The literacy level in PNG is 62%, one of the lowest in the world, due to factors that include a high percentage of the population living in rural areas and a rugged geography that makes it challenging to distribute learning materials to isolated regions. The participants have now started to read and write in English and Tok Pisin (New Guinea Pidgin or "Pidgin"), a mix of English, German, Malay, Cantonese, Kuanua and other Pacific languages that is the most widely used language in the country. The program will continue into 2022.

1 <https://data.worldbank.org/indicator/SE.ADT.LITR.ZS?locations=PG>



K92 views literacy as an essential part of our local investment and a key component to sustainable development.

ENVIRONMENTAL STEWARDSHIP

TRACKING OUR FOOTPRINT

As a mining company, we view environmental stewardship and minimizing our impacts as a fundamental responsibility and critical to our success as a business. Management and protection of the land and waterways where we explore and operate ensures a healthy and prosperous future for all.



TRACKING OUR FOOTPRINT

OUR APPROACH

Through conscientious planning our environmental footprint remains the smallest of the mining companies in PNG. As we expand operations, systems, and advance our exploration efforts, we will strive to go beyond regulatory requirements and add new practices to reduce our footprint even further.

We have an integrated Health, Safety and Environment (HSE) policy that is approved by K92's General Manager. The HSE policy outlines and clearly defines how we want to conduct business while prioritizing the importance of environmental and social responsibilities. Internal environment management plans and standards have been developed following the ISO 14001 guideline, and it is reviewed every two years. We provide continuous support of exploration activities by doing regular site inspections. There have been zero reportable environmental incidents since K92 took ownership of the mine in 2015.

Key environmental stewardship-related events from 2021 and early 2022 include the following:

- Engagement of consultants to conduct environment impact studies for major environment permit amendment planned in 2022.
- Conditional environment permit issued by the Conservation Environment Protection Authority (CEPA) in March 2021 to capture K92 Mine expansion projects. The final amended environment permit will be issued once all conditions in the permit are met.
- Submission of bi-monthly and Annual Environment Report to CEPA.
- Designated a Company representative from the environment section to work with the Chamber of Mines.
- Participated in a review of the National Waste Management plan presented by CEPA and Chamber of Mines in Goroka.



Clearing small areas at a time and using hand-held implements instead of heavy, earth-moving equipment, coupled with operating an underground mine, contribute to the smallest environmental footprint of mining companies in PNG.

WASTE AND TAILINGS MANAGEMENT

Tailings management

Our Tailings Storage Facility (TSF) pond is one of only two that mining companies in PNG are using to dispose of the waste generated by mining operations.

No cyanide is used on site, no hazardous chemicals are used in the processing plant for gold extractions, and wastewater discharged from the TSF is monitored by the environment section. Recycling process plant water, to limit the use of our water sources, is integrated into our TSF system. Water quality checks are done through an accredited laboratory and reports are submitted to CEPA annually.

The current TSF has an ultimate capacity of approximately 4 million tonnes, and the total amount deposited by December 2021 was 1,073,916 tonnes. As part of our Stage 3 Expansion, our plans to commence underground paste fill will help mitigate tailings at surface as well. Although not a standard scenario, in early 2022, CEPA and Minerals Resources Authority (MRA) representatives were on site at the same time to inspect the progress on the expansion, resulting in both agencies agreeing on the advancement of various permits to the final construction stage. We were granted permission to have a higher rate of unloading waste into the existing TSF as we wait to finish the expansion.

The tailings and treated wastewater discharge monitoring were consistent throughout the year, and the water discharged was within permissible range, meeting or exceeding requirements outlined in the K92 Mine Environment Permits. The annual discharge was 301,043 m³ (48.62%), and the annual discharge for treated wastewater was 619,200 m³.

Additional environmental monitoring stations were established at the TSF for water quality monitoring during the expansion construction along with ongoing monitoring and reporting. We expect an increase in wastewater discharge from TSF as part of the major expansion. The TSF will require 348,500 m³ of waste rock (approximately 700 000 t), which is now stockpiled near the TSF area. Construction will start in 2022.

Waste management

The sewage treatment plant for the common accommodation blocks and the dam area was approved by the Board in 2021 and construction started in early 2022; fencing is in place, a contractor has been engaged, and the delivery of materials is pending. The estimated project completion date is late 2022.

A general waste management contract was awarded to a local landowner business as a JV that will manage general waste, waste oil, scrap metals and other wastes generated by the mine.

We are having good success in repurposing some of our materials from the mine: a local company has expressed interest in buying our used oil from which they would extract the impurities, then re-sell it. Similarly, instead of burying tires that are at the end of their current life, a local business will take these tires and reprocess the rubber for different uses. Trucking in 1,000 tonnes of crushed waste rock on a weekly basis will no longer be necessary. In 2022, we will purchase a crushing and screening machine and engage a community group to operate it as a business. They will then sell the finished crushed material back to K92, and to other businesses and individuals in the area.

WATER STEWARDSHIP

Our operations, our host communities and the environment all depend on clean and uncontaminated water. We have systems in place to ensure each have the necessary amounts of uncontaminated water for drinking, washing and other domestic purposes. Despite PNG having the third highest rainfall in the world, there are challenges in capturing the required amounts of water, so we are diligent in our efforts to protect and provide access to this vital resource.

Until 2022, the site drew water from two bore sources; however, the extraction rate at the camp has increased due to the increased work force as part of the mine expansion so we are working closely with CEPA to update our volume of water extraction rate and identify additional sources.

A number of water wells were drilled at the processing area and the Kumian camp and water is now sourced from these bore wells that feed into the new, operational water treatment plant. Weekly monitoring and treatment is conducted and water is tested before human consumption and use.

At the water extraction and discharged locations, flow meters are installed to measure the extraction and discharge rates. The change in volume of water extracted will be captured on the amended environmental permit.

BIODIVERSITY EFFORTS

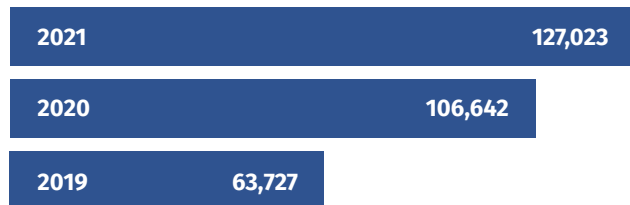
Our standard exploration footprint is small since we typically clear small areas at a time and use hand-held implements instead of heavy, earth-moving equipment. We monitor the land and revegetate any disturbed sites and also try to mitigate artisanal mining activities that we know can cause serious land impacts. The decision to operate an underground mine also has fewer environmental impacts to flora and fauna.

Our mine nursery continues to grow tree seedlings, which we use to rehabilitate land. We also share them with our communities to support their environmental programs. K92 has been supporting the Environment Minister’s initiative of 10 Million Trees for 10 Years program that started in 2020. This PNG program aims to plant 1 million trees per year until 2030 to help mitigate climate change impacts, protect the land and improve livelihoods for local communities.

The Environment team, with assistance from the Community Relations team, have delivered more than 10,000 tree seedlings to impacted schools around the mine in 2021. In 2022, we plan to deliver more tree seedlings to commemorate World Environment Day.

Total freshwater withdrawal from 2019 to 2021

(CUBIC METRES (m³))



ENERGY AND GREENHOUSE GAS EMISSIONS

K92 has one of the lowest carbon footprints in the world in the mining sector with carbon intensities per gold equivalent ounce produced at 0.3684 tCO₂e per ounce, approximately 50% less than the global average¹. Currently, the energy consumed at our operations is primarily in the form of hydroelectricity followed by fossil fuels such as diesel, petrol and liquefied petroleum gas (LPG). Diesel is predominantly consumed to power our backup gensets, mobile equipment and light vehicles. There was an increase in use of diesel for mining operations due to increased production.

¹ Based on S&P Global Market Intelligence 2020 data on a gold produced basis

We will be doubling our power demand to support the expansion, and in preparation, the mine undertook a major power upgrade in 2021. To improve reliability of power, we plan to provide capital to PNG Power for their own upgrades which will be paid back to us through a discount in our power fees. This improved reliability means that we will use our own standby generators less, decreasing the amount of diesel consumed.

K92 is committed to using clean, hydroelectric power from the grid and supporting the modernization of grid infrastructure through collaboration with the government in order to reach households that currently do not have access. We are also increasingly exploring the use of solar power as a clean, reliable and renewable energy source. In 2020, after significantly rehabilitating the Bilimoia community clinic, we installed a hot water system and a powerful solar power system to ensure a 24-hour power supply. A solar power system was also provided for the Punano Clinic to provide nurses with a reliable light source. Additionally, in 2021, solar lighting was installed around the camp and mine sites.

CASE STUDY

FRESH WATER FOR COMMUNITIES

Providing impacted communities with fresh water, as well as easier access to potable water, continues to be a key priority. Despite ongoing restrictions and challenges associated with the pandemic, our work continued. From conducting needs surveys to

improving existing water lines to installing new water supply systems, multiple villages surrounding the mine were able to “turn on the taps” and keep existing ones flowing.



A greenhouse gas (GHG) inventory for our Scope 1 and 2 emissions, including the percentage covered under emissions-limiting regulations, was completed in early 2022 to help us establish a baseline for our next reporting cycle. The purchase of equipment and the training of personnel is in progress so we can build our monitoring and management systems based on the results of inventory development.

The charts below highlight our total and renewable energy consumption from 2019 to 2021.

The following chart illustrates our ongoing work in this area in 2021, for a total investment of \$37,500 in materials (excludes labour).

Site	Work Completed
Bilimoia 3	5,000 L Tuffa Tank installed
Bilimoia 2	250 L Tuffa Tank installed on roof
Bilimoia 1	Water source identification from Kora headwater
Bilimoia Dam	Construction for gravity feed supply/Spring source dammed
Bilimoia – Clinic	Hand pump repaired and tested at the clinic
Dabua – Gardens	Tapped water 4 kilometres from mountains to school
Papua – Agricultural project	Tapping of water for agricultural project 4 kilometres from mountains
Watarais – School	Well is now working with pump
Karapumpa	Gravity feed to community from mountain
Pomasi Primary School	Gravity feed from mountain
Urivempa, Pomasi 1	2nd year of clean flowing water, upkeep managed by the Water Users Committee, members of the village

Total energy consumption

(GIGAJOULES (GJ))

2021	79,081
2020	79,311

Renewable energy as a percentage of total energy consumed

(PERCENTAGE)

2021	61
2020	64 ¹
2019	82 ¹

¹ This value represents the total electricity from the grid. Breakdown of grid thermal energy and renewable energy is not currently available. A correction will be made in the next reporting cycle.

OUR COMMITMENT TO MANAGING CLIMATE RISKS AND ACCESSING OPPORTUNITIES

At K92, we recognize that climate change is present, is accelerating, and poses a threat to our business, our sector and society at large. As a result, we must all take meaningful steps to rapidly reduce carbon emissions globally in order to avoid the worst impacts of climate change and transition to a low carbon economy.¹

K92 is taking steps to support a low carbon transition and to build climate resilience, by beginning to align our company with the Task Force on Climate-related Financial Disclosures (TCFD). We have developed a road map for enhancing our climate-related management practices, including where we aim to align to specific TCFD recommendations.

OUR CLIMATE-RELATED RISKS AND OPPORTUNITIES

In 2022, we conducted a climate-related risk and opportunity assessment to understand our exposure to physical climate change and the low carbon transition.¹

In our assessment, we accessed data from global climate models to describe the changing climate under a high warming scenario; we held discussions with executive leadership and site-level personnel to understand how climate events may impact our operations as well as employee health and safety; and we then assessed the risks and opportunities of a potential low carbon transition.

We considered the impacts of carbon pricing and reputational risks, as well as potential changes in the market for the goods we produce, including gold and copper. While climate change is bringing many risks to K92, we concluded that a low carbon transition also presents many opportunities:

- **Energy efficiency:** Despite running a relatively low energy and emissions mining operation, we expect our footprint to continue to decline as we begin to leverage low carbon hydroelectricity to power our vehicles and our on-site facilities.
- **Market opportunities:** Copper is a key material for a low carbon transition, playing a key role in electric vehicle batteries and as a component of wind and solar generation assets. Greater recovery of copper at our Kainantu mine and in deposits in the immediate vicinity of the mine presents an opportunity for K92 in a low carbon transition.

- **Physical risks:** We may have some physical risk since we may experience more days of high heat and heavy precipitation, which could impact working conditions. But as much of our mining operations in the Kainantu site take place below ground, we anticipate being able to adapt our on-site working conditions to minimize worker impacts and operational disruptions.
- **Policy risks:** Carbon pricing may present additional operating costs to our business. However, the carbon intensity of our operations is low and we expect to continue to reduce our emissions into the future.

Our recent assessment represents a first step in understanding and acting on our climate plan. We plan to continue assessing our resilience to climate change, under different climate change scenarios.

HOW WE MANAGE CLIMATE RISKS

We have governance and risk management processes that are designed to help us manage climate change risks. Our newly formed EHS Committee, chaired by Non-Executive Director Anne Giardini, provides oversight with respect to environmental, climate change, health, safety, and other ESG matters. The Committee ensures the ongoing reporting of climate-related risks to the Board and assigns responsibility for climate risk oversight.

From a management perspective, the CEO and executive management have a commitment to monitoring and minimizing climate-related risks and carbon emissions. This applies to the Kainantu mine and future sites, for the purposes of minimizing our impact on climate change, protecting the health and safety of our workers, and ultimately preserving business value.

Lastly, senior mining staff, including the General Manager of Kainantu Gold Mine and the General Manager of External Affairs and Sustainable Development, report our greenhouse gas footprint and climate-related impacts to the Company's Health and Safety Committee. For more information on our GHG measurement and emissions, see pages [32–33](#).

¹ The Sixth Assessment Report from the Intergovernmental Panel on Climate Change

PERFORMANCE DATA

Topic/Metric	Unit of Measure	2021	2020	2019
Financial/Operations				
Financial Performance				
Revenue	\$ millions	\$154.3	\$159.1	\$101.7
Net income	\$ millions	\$27.2	\$42.0	\$32.5
Production of finished metal	AuEq ounces (thousands)	104,196	98,872	82,256
Employees and Suppliers				
Total Headcount				
Total number of employees and contractors	Number	873 employees 410 contractors	840 employees 242 contractors	840 employees 242 contractors
Employees and contractors as a percentage of the workforce	Percentage	68% employees 32% contractors	77% employees 23% contractors	78% employees 22% contractors
Diversity and Inclusion				
PNG employees by nationality (% PNG and % international)	Percentage	95% PNG 5% international	95% PNG 5% international	96% PNG 4% international
PNG contractors by nationality (% PNG and % international)	Percentage	98% PNG 2% international	99% PNG 1% international	97% PNG 3% international
Health and Safety				
Fatality rate	Rate	0	0	0
Near miss frequency rate (NMFR)	Rate	9	8	3
Lost-time injuries (LTI)	Number	1	1	1
Communities				
Community investment expenditure	\$ millions	\$0.9	\$1.2	\$0.7
Expenditures to community joint ventures with businesses that are nationally owned	\$ millions	\$15.5	\$9.9	\$6.6

Topic/Metric	Unit of Measure	2021	2020	2019
Environment				
Greenhouse gas emissions	Metric tons of carbon dioxide equivalent (MtCO ₂ e)	Scope 1 = 25,881 Scope 2 (Location-based) = 12,507 Scope 2 (Market-based) = 3,327 Total Scope 1 + 2 (Location-based) = 38,389 Total Scope 1 + 2 (Market-based) = 29,208	Scope 1 = 14,044 Scope 2 (Location-based) = 5,166 Total Scope 1 + 2 (Location-based) = 19,210	Not available
Total energy consumption	Gigajoules (GJ)	79,081	79,311	Not available
Total electricity consumption	Megawatt-hours (MWh)	Grid = 17,323 Diesel = 4,644 Total = 21,967	Grid = 14,112 Diesel = 7,919 Total = 22,031	Grid = 12,209 Diesel = 2,662 Total = 14,871
Percentage grid thermal energy ¹	Percentage	18%	64% ²	82% ²
Percentage renewable energy ¹	Percentage	61%	64% ²	82% ²
Percentage on-site diesel energy ¹	Percentage	21%	36%	18%
Total freshwater withdrawal	Cubic metres (m ³)	127,023	106,642	63,727

1 As a percentage of the total electricity consumption

2 This value represents the total electricity from the grid. Breakdown of grid thermal energy and renewable energy is not currently available. Additional information will be made available in the next reporting cycle.

SASB CONTENT INDEX

This Sustainability Accounting Standards Board (SASB) content index aims to provide a consolidated overview of K92 Mining's reporting against the SASB Metals & Mining standard (version 2021-12).

Accounting Metric	Category	Unit of Measure	Code	Disclosure Response
Greenhouse Gas Emissions				
Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t) CO ₂ e, Percentage (%)	EM-MM-110a.1	We completed a GHG inventory for our Scope 1 and 2 emissions, including the percentage covered under emissions-limiting regulations, in early 2022 to help us establish a baseline. We aim to report our emissions, including the percentage covered under emissions-limiting regulations, in our next reporting cycle.
Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a	EM-MM-110a.2	<p>K92's long-term emissions reduction goal is to achieve carbon neutrality. To achieve this:</p> <ol style="list-style-type: none"> 1. We have replaced our underground loader fleet from Tier 2 spec to Tier 3 and Tier 5 spec machines, which greatly reduces our emissions. 2. We are using Ultra Low Sulphur Diesel Fuel (ULF) in our operations, which will reduce our GHG (SO_x) emissions. Sulphur content in ULF is four times lower than that in regular diesel. 3. We have begun studies on the possibility of electrifying our underground operations (fleet and equipment) and replacing diesel-powered equipment with battery/electric equipment. 4. We will continue our tree planting efforts with the help of local communities. <p>2021 Sustainability Report > Environmental Stewardship > Energy and Greenhouse Gas Emissions, pages 32-33</p>
Air Quality				
Air emissions of the following pollutants: (1) CO, (2) NO _x (excluding N ₂ O), (3) SO _x , (4) particulate matter (PM ₁₀), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)	Quantitative	Metric tons (t)	EM-MM-120a.1	We do not currently track the total quantity of air emissions emitted but do monitor the concentration of key pollutants in the air, including that of carbon monoxide as per regulatory requirements.

Accounting Metric	Category	Unit of Measure	Code	Disclosure Response												
Energy Management																
(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)	EM-MM-130a.1	<p>(1) Total energy consumed – 79,081 GJ</p> <p>(2) and (3) Percentage grid electricity and percentage renewable energy – 79% (62,363 GJ). All the electricity from the grid was renewable.</p> <table border="1"> <thead> <tr> <th>Energy Type</th> <th>Percentage Electricity</th> <th>Gigajoules (GJ)</th> </tr> </thead> <tbody> <tr> <td>Purchased electricity</td> <td>79%</td> <td>62,363</td> </tr> <tr> <td>On-site generated electricity</td> <td>21%</td> <td>16,717</td> </tr> <tr> <td>Total electricity</td> <td>100%</td> <td>79,081</td> </tr> </tbody> </table> <p>We draw the majority of our electricity from Eastern Highlands Province Power, which generates low carbon hydroelectric power.</p> <p>Our energy consumption and percentage renewable energy figures include electricity generated on site via diesel generators and purchased through local utilities. They do not currently include other forms of energy.</p> <p>2021 Sustainability Report > Environmental Stewardship > Energy and Greenhouse Gas Emissions, pages 32–33</p>	Energy Type	Percentage Electricity	Gigajoules (GJ)	Purchased electricity	79%	62,363	On-site generated electricity	21%	16,717	Total electricity	100%	79,081
Energy Type	Percentage Electricity	Gigajoules (GJ)														
Purchased electricity	79%	62,363														
On-site generated electricity	21%	16,717														
Total electricity	100%	79,081														
Water Management																
(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with high or extremely high baseline water stress	Quantitative	Thousand cubic metres (m ³), Percentage (%)	EM-MM-140a.1	<p>(1) Total fresh water withdrawn – 127,023 m³</p> <p>(2) Total fresh water consumed – 127,023 m³*</p> <p>We do not withdraw water from regions with high or extremely high baseline water stress.</p> <p>*All the water that is consumed is fresh water. Once withdrawn, water consumption is not currently measured.</p> <p>2021 Sustainability Report > Environmental Stewardship > Water Stewardship, page 31</p>												
Number of incidents of non-compliance associated with water quality permits, standards and regulations	Quantitative	Number	EM-MM-140a.2	There were no incidents of non-compliance associated with water quality permits, standards and regulations in 2021.												

Accounting Metric	Category	Unit of Measure	Code	Disclosure Response
Waste and Hazardous Materials Management				
Total weight of non-mineral waste generated	Quantitative	Metric tons (t)	EM-MM-150a.4	Total weight of non-mineral waste generated – 2,847 t The waste data includes domestic waste from camps (kitchen waste) and office waste (site waste excluding electronics).
Total weight of tailings produced	Quantitative	Metric tons (t)	EM-MM-150a.5	Total weight of tailings produced – 319,748 t
Total weight of waste rock generated	Quantitative	Metric tons (t)	EM-MM-150a.6	Total weight of waste rock generated – 393,546 t
Total weight of hazardous waste generated	Quantitative	Metric tons (t)	EM-MM-150a.7	Total weight of hazardous waste generated – 100 t of waste oil The hazardous waste generated at the site is from explosives, hydrocarbons and mill reagents. The waste is not weighed, but all hazardous substances are handled by competent and trained personnel.
Total weight of hazardous waste recycled	Quantitative	Metric tons (t)	EM-MM-150a.8	Total weight of hazardous waste recycled – 70 t of waste oil The balance (30 t) of waste oil that was generated will be recycled and captured in next year's report.
Number of significant incidents associated with hazardous materials and waste management	Quantitative	Number	EM-MM-150a.9	No significant incidents or spillage occurred during 2021.
Description of waste and hazardous materials management policies and procedures for active and inactive operations	Discussion and Analysis	n/a	EM-MM-150a.10	2021 Sustainability Report > Environmental Stewardship > Waste Management, page 30
Biodiversity Impacts				
Description of environmental management policies and practices for active sites	Discussion and Analysis	n/a	EM-MM-160a.1	2021 Sustainability Report > Environmental Stewardship > Biodiversity Efforts, page 31
Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	Quantitative	Percentage (%)	EM-MM-160a.2	There was no acid mine drainage at Kainantu in 2021. 2021 Sustainability Report > Environmental Stewardship > Biodiversity Efforts, page 31
Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Quantitative	Percentage (%)	EM-MM-160a.3	K92 does not operate in areas with protected conservation status or endangered species habitat.

Accounting Metric	Category	Unit of Measure	Code	Disclosure Response
Security, Human Rights and Rights of Indigenous Peoples				
Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Quantitative	Percentage (%)	EM-MM-210a.1	K92 does not operate in areas with proved and/or probable reserves in or near areas of conflict.
Percentage of (1) proved and (2) probable reserves on or near Indigenous land	Quantitative	Percentage (%)	EM-MM-210a.2	K92 does not operate in areas with proved and/or probable reserves on or near Indigenous land.
Discussion of engagement processes and due diligence practices with respect to human rights, Indigenous rights, and operation in areas of conflict	Discussion and Analysis	n/a	EM-MM-210a.3	2021 Sustainability Report > Our People > Security, pages 17–18 2021 Sustainability Report > Social Responsibility > Communities, page 23
Community Relations				
Discussion of process to manage risks and opportunities associated with community rights and interests	Discussion and Analysis	n/a	EM-MM-210b.1	2021 Sustainability Report > Social Responsibility > Community Relations, page 23
Number and duration of non-technical delays	Quantitative	Number, Days	EM-MM-210b.2	K92 had no non-technical delays in 2021 related to conflicts within the local communities near the Kainantu mine site.
Labour Relations				
Number and duration of strikes and lockouts	Quantitative	Number	EM-MM-310a.2	There were no strikes or lockouts in 2021.

Accounting Metric	Category	Unit of Measure	Code	Disclosure Response
Workforce Health and Safety				
(1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	Quantitative	Rate	EM-MM-320a.1	(1) MSHA all-incidence rate – 52.7 (per 1,000,000 man-hours) (2) Fatality rate – 0% (3) Near miss frequency rate (NMFR) – 9 (4a) and (4b) Total average hours of health, safety, and emergency response training for full-time and contract employees (combined) – 466 hours Note: Our frequency rates are calculated using the Papua New Guinea standard, which is to multiply the statistic count by one million before dividing by the total hours worked. The NMFR calculation methodology was revised to align with the Papua New Guinea standard for this metric of taking the number of near misses and multiplying it by one million before dividing by the total hours worked.
Business Ethics and Transparency				
Description of the management system for prevention of corruption and bribery throughout the value chain	Discussion and Analysis	n/a	EM-MM-510a.1	2021 Sustainability Report > Our Approach, page 8
Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Metric tons (t) saleable	EM-MM-510a.2	Papua New Guinea does not rank within the lowest 20 countries of Transparency International's Corruption Perception Index.

Accounting Metric	Category	Unit of Measure	Code	Disclosure Response
Tailings Storage Facilities Management				
Tailings storage facility inventory table: (1) facility name, (2) location, (3) ownership status, (4) operational status, (5) construction method, (6) maximum permitted storage capacity, (7) current amount of tailings stored, (8) consequence classification, (9) date of most recent independent technical review, (10) material findings, (11) mitigation measures, (12) site-specific Emergency Preparedness and Response Plan (EPRP)	Quantitative	Various	EM-MM-540a.1	<p>Information on our tailings storage facility inventory table:</p> <p>(1) Facility name – Kainantu Gold Mine Tailings Storage Facility (TSF)</p> <p>(2) Location – Kainantu Gold Mine</p> <p>(3) Ownership status – K92 Mining Limited</p> <p>(4) Operational status – In operation</p> <p>(5) Construction method – Downstream embankment construction</p> <p>(6) Maximum permitted storage capacity – 1.124 million cubic metres</p> <p>(7) Current amount of tailings stored – 657,000 cubic metres, based on 1.3 density</p> <p>(8) Consequence classification – Very low for environmental spill scenario and extreme for dam break scenario</p> <p>(9) Date of most recent independent technical review – February 2022</p> <p>(10) Material findings – No unsafe conditions were observed at the Kainantu TSF.</p> <p>(11) Mitigation measures:</p> <p>a. A revised Dam Breach Assessment (DBA) was undertaken for the planned TSF raise.</p> <p>b. K92 intends to improve internal best practices by adopting and aligning with the GISTM standard.</p> <p>c. An Operations and Management Plan (OMP) is available for the Kainantu TSF.</p> <p>d. The Kainantu TSF has an Emergency Safety Plan in place that outlines internal emergency response procedures. While external emergency preparedness is not outlined, the EPRP and Triggered Action Response Plan (TARP) will be used at the facility in accordance with international best practices.</p> <p>(12) Site-specific EPRP – K92 has a site-specific Emergency Preparedness and Response Plan (Specific Emergency Response Plan) in place.</p>

Accounting Metric	Category	Unit of Measure	Code	Disclosure Response
Tailings Storage Facilities Management (cont'd)				
Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	Discussion and Analysis	n/a	EM-MM-540a.2	2021 Sustainability Report > Environmental Stewardship > Waste Management, page 30
Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	Discussion and Analysis	n/a	EM-MM-540a.3	<p>On a weekly basis, K92's Environmental and Geotechnical teams perform routine inspections at the TSF to identify hazards, assess the risks associated with those hazards and ensure that appropriate plans and resources are put in place to respond to emergencies that may occur.</p> <p>For the Kainantu TSF, K92 developed the Specific Emergency Response Plan as well.</p>
Activity Metrics				
Production of (1) metal ores and (2) finished metal products	Quantitative	Metric tons (t) saleable	EM-MM-000.A	<p>(1) Metal ore processed – 336,221 t</p> <p>(2) Total gold/gold equivalent – 104,196 oz</p>
Total number of employees, percentage contractors	Quantitative	Number, Percentage (%)	EM-MM-000.B	<p>Total number of employees – 873</p> <p>Total number of contractors – 410</p> <p>Percentage contractors – 32%</p>



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