



SUSTAINABILITY REPORT 2022
MINING WITH A GREATER PURPOSE



IVANHOE
MINES

Contents

	About this report	02
1	OUR APPROACH TO SUSTAINABILITY	
	Sustainability reporting framework and cycle	04
	Message from the Chair of our Sustainability Committee	05
	Message from our President	06
	Our sustainability strategy, key priorities and approach to reporting	07
	Our 2022 sustainability objectives and targets	09
	Tracking our key metrics	11
	Our 2022 performance at a glance	12
2	OUR BUSINESS AT A GLANCE	
	Our Company and the metals to fuel the just transition	14
	Our Principal Projects	15
	The Kamo-a-Kakula Copper Complex	16
	The Platreef Project	17
	The Kipushi Project	18
	The Western Foreland Exploration Project	19
3	OUR GOVERNANCE	
	Our commitment and approach to governance	22
	Governing body	23
	Ethical behavior	24
	Transparency and risk management	25
	Our strategic stakeholder management	26
	The human rights lens	31
	Materiality assessment	33
	Ivanhoe Mines and the United Nations Sustainable Development Goals	36

4	OUR PEOPLE	
	Our commitment and approach to people	39
	Our workforce	40
	Our labor relations	41
	Diversity, inclusion and local employment	42
	Our performance management	45
	Our remuneration, recognition, rewards and retention	46
	Health, safety and well-being	47
	Crisis management planning and emergency preparedness	56
	Skills for the future	57
	Building intellectual capital through quality education and industry innovation	60

5	OUR PROSPERITY	
	Our commitment and approach to prosperity	63
	Employment and wealth generation	64
	Our approach to local procurement	67
	Transformative innovation through enterprise and supplier development	71
	Community and social vitality	74
	Infrastructure for sustainable cities and communities of the future	83
	Economic and physical displacement, and livelihood restoration	85

6	OUR PLANET	
	Our commitment and approach to environmental stewardship	88
	Compliance, monitoring and awareness	90
	Water stewardship	92
	Climate change, energy and greenhouse gas emissions	98
	Biodiversity and ecosystem management	104
	Cultural heritage	106
	Tailings and waste management	107
	Mine closure	109

7	KEY PERFORMANCE DATA	
	Our Governance	111
	Our People	111
	Our Prosperity	113
	Our Planet	114

8	APPENDICES	
	Abbreviations and Glossary	117
	Forward-looking statements	118
	Information and contact details	119



The KICO band performing for honoured guests and employees at the launch ceremony held on August 23, 2022.



Video link



Creating prosperity



Stewarding our planet

VIEWING OUR REPORT

VIEWING THIS REPORT

This interactive PDF is best viewed in **Adobe Acrobat** for desktop, mobile or tablet*.

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About this report

This 2022 Sustainability Report is Ivanhoe Mines Ltd.'s (Ivanhoe, Ivanhoe Mines or the Company) sixth annual public report since publication of our first report in 2018. Focusing on the areas that are material to – or of the greatest interest, importance and impact to – our internal and external stakeholders on local, regional and global levels, the report provides updates on our economic, health and safety, environmental, social and sustainability governance issues, activities and performance. Our key stakeholders include the communities near our operations and host governments in the countries where we operate, our employees, our suppliers, and our investors.

This annual report, published in accordance with the Global Reporting Initiative (GRI) Standards, reinforces the Company's objective of transparency in reporting on its sustainability initiatives and performance, taking cognizance of among others the OECD Guidelines for Multinational Enterprises on disclosure practices, and consists largely of information about the Company's sustainability management approach, policies, practices

and performance for the reporting period. Our approach to the creation of shared value for our shareholders and society is underpinned by the World Economic Forum's (WEF) four pillars for stakeholder capitalism – principles of governance, people, planet and prosperity – which are aligned to the United Nations Sustainable Development Goals (SDGs). This Sustainability Report aims to provide relevant disclosures and information that meet the needs of individuals across various internal and external stakeholder groups and augments filings and public disclosures made by the Company under applicable securities laws and stock exchange rules, copies of which can be found on our website or under the Company's profile on the System for Electronic Document Analysis and Retrieval (SEDAR) at www.sedar.com. Detailed information regarding our nature of ownership, legal form, financial and operational results for the reporting period can be found in our Annual Information Form (AIF), 2022 Annual Management's Discussion and Analysis (MD&A) and Financial Statements, and the Management Information Circular.



WEBSITE
Indicates that additional information is available online. Click on links in the report.



PAGE REFERENCES
Refer readers to information elsewhere in this report.

NAVIGATION TOOLS ARE PROVIDED AT THE TOP OF EVERY PAGE

Contents Previous page Page no



Back Next page



Video links in this report showcase our performance across our pillars.



1

OUR APPROACH TO SUSTAINABILITY

I've seen miracles created in my lifetime. I've seen many things become huge out of nothing. And so that's always changed my view, and made me feel that truly anything is possible, and that we're really limited only by the human imagination and focusing our attention continuously until we achieve what it is we imagined.

Robert M. Friedland
Founder, Executive Co-Chairman

Katiana Ilunga Kasongo, Worker, and Leonie Nfund Kat, Livelihoods Technician, harvesting pineapples from Kamo-a-Kakula's Sustainable Livelihoods Program.

Sustainability reporting framework and cycle

Reporting cycle and period

Annual, January 1, 2022 to December 31, 2022. Information for preceding years has been provided where available and applicable.

Report scope and boundary

This Sustainability Report aims to provide our broad stakeholder base with a comprehensive view of Ivanhoe Mines' sustainability performance. Our disclosures are based on a 100%-project basis, as if the Company owned 100% of all operations, even though each project has individual shareholding structures. We include information from our three material projects in South Africa and the Democratic Republic of the Congo (DRC), and the highly prospective Western Foreland Exploration Project in the DRC, over which Ivanhoe Mines has direct or joint management control and significant influence (projects).



Corporate historical data, as well as historical data for the Western Foreland Exploration Project, have only been provided where relevant.

For occupational health and safety statistics purposes, 'total workforce' in this Sustainability Report means the number of 14,716 employees and contractors who are eligible for induction and/or medical surveillance and contributing to the safety statistics, as at December 31, 2022.

All figures stated herein are in U.S. dollars, unless otherwise specified.

Material topics

Subjects are prioritized for inclusion in the Sustainability Report based on the identification of key impacts – including human rights impacts – on the economy, environment, and our stakeholder as well as key risks to the business, as approved by the Sustainability Committee of the Board.

Reporting frameworks

Acknowledging that our broad range of stakeholders each have their own specific disclosure needs or requirements in respect of our sustainability performance, our approach to sustainability reporting is guided by these diverse views, as well as by various reporting regulations, good practice standards, and frameworks to disclose our material sustainability impacts, risks and opportunities. The information in this Sustainability Report has largely been prepared and presented in accordance with the GRI's Core Option Standards, as well as the World Economic Forum's International Business Council Stakeholder Capitalism Metrics (WEF SCM).

A few of the other frameworks underpinning our reporting approach, include the International Council of Mining and Metals' (ICMM) 10 Principles; A Best Practice Framework for Sustainable Development; the Local Procurement Reporting Mechanism (LPRM); the Task Force for Climate related Financial Disclosures (TCFD); the United Nations Global Compact (UNGC); and the United Nations Sustainable Development Goals (UN SDGs.) The world's understanding and framing of Environmental, Social and Governance (ESG) matters, frameworks and reporting obligations is continuously evolving, and we will continue refining our reporting approach over time. Our Sustainability Management System (SMS) (discussed further on p8) will further enable more systematic organization of our sustainability approach and performance.

See https://ivanhoemines.com/site/assets/files/5331/18644_ivanhoe_sr_2022_gri_statement_-_proof_2.pdf for GRI Content and Reporting Frameworks Index

Disclosure process and assurance approach

Our reporting process begins with our materiality assessment, reviewing our most material matters for sustainability reporting.

We ensure the accuracy of our published disclosures through our internal controls, management assurance, and internal audit reviews, supported by independent external service providers, as may be applicable. In line with their mandate, the Sustainability Committee reviews and recommends the annual Sustainability Report to the Board for approval.

We have previously engaged an independent audit firm to perform an independent assurance readiness assessment on a limited number of key performance indicators (KPIs), as well as provide advice on the Company's processes to support an assured report. The Company is implementing the recommendations of the auditor's report, as well as systems and other measures towards achieving full third-party assurance of its Sustainability Report.

In the journey towards full assurance, the 2023 workforce data provided in Our People (Our workforce; Diversity, inclusion and local procurement; and Our performance management), as well as the 2023 financial data provided in Our Prosperity (Total value created and distributed) will be assured in the 2023 Sustainability Report.



Cameron Dinnie, Sustainability Compliance Coordinator, conducting an environmental and social inspection at Kamo-Kakula.

To our valued stakeholders

Making meaningful strides for female inclusion and human rights empowerment

Our commitment and determination to build and operate our mines as true showcases for responsible environmental stewardship, transformative social performance, and ethical, transparent governance drives everything that we do. In seeking to ensure that the social and economic benefits from our discoveries are shared as widely as possible, we are pushing forward in our pursuit of becoming a leading “impact organization” and making a meaningful contribution to global sustainable development agendas. Acknowledging both the long-term, shared value yielded by sustainable development and its direct correlation to our social licence to operate, within the context and benefits of sound ESG practices, we affirm our commitment to taking ESG seriously and applying its considerations to our strategic drivers, organizational practices, decision-making structures and stakeholder engagements – including in monitoring our performance and ensuring transparent, meaningful reporting and disclosures.

Ivanhoe Mines strives to maintain the highest standards of ethics, corporate governance, honesty and accountability, and acknowledges that our foundations of corporate citizenship and respect for human rights are essential building blocks to the business imperative of building shared and sustained value. We embrace an intrinsic sense of respect for fundamental human rights, and affirm our commitment to identify, prevent, mitigate and remediate negative human rights impacts, by conducting ongoing human rights due diligence and embedding human rights management plans into our operations (see page 31). We have always sought to align our practices with the ten principles which the UNGC seeks to promote, and in 2022, Ivanhoe Mines formalized this commitment through membership of the UNGC Canada.

From an industry perspective, Ivanhoe Mines is committed to the vision, objectives and policy undertakings of the ICMM, acknowledging the ICMM imperative to implement good practices and innovation to improve social, environmental and economic performance, as well as its ambitious plans across numerous key agendas, including nature (see page 104), climate change (see page 98), tailings management (see page 108), and diversity, equity and inclusion (see page 42).

In our pursuit for stakeholder capitalism and creating long-term, shared value, Ivanhoe Mines makes concerted investments in the countries and host communities where we operate. These investments across the four pillars of our sustainable development approach include our community enhancement initiatives, local procurement opportunities

and the stakeholder agreements concluded with our host governments, host communities, local entrepreneurs and employees. Approximately \$2.2 billion of total value was created and distributed in the 2022 reporting period (see page 64).

We acknowledge that transparency and increased disclosure of ESG data and performance leads to opportunities for enhanced performance and greater social trust. We therefore strive towards being a leader in sustainable development, as well as to seek continual improvement in our information disclosures and in the performance areas of the metrics underlying these disclosures. As such we have put significant work into developing our bespoke sustainability management system (see page 8). Pursuant to our commitment towards transparency, in 2022, Ivanhoe officially signed up to the Extractives Industry Transparency Index (see page 25).

In 2022, we celebrated the feature of Ivanhoe Mines’ President, Marna Cloete in the UK WIM100. Marna was selected from 491 women in mining across 61 countries, which acknowledges her inspirational actions and contributions to the mining industry. This feature showcases Marna as a trailblazer in implementing impactful changes to the industry and an advocate for the empowerment of those working in the mining industry and beyond. (See page 43).

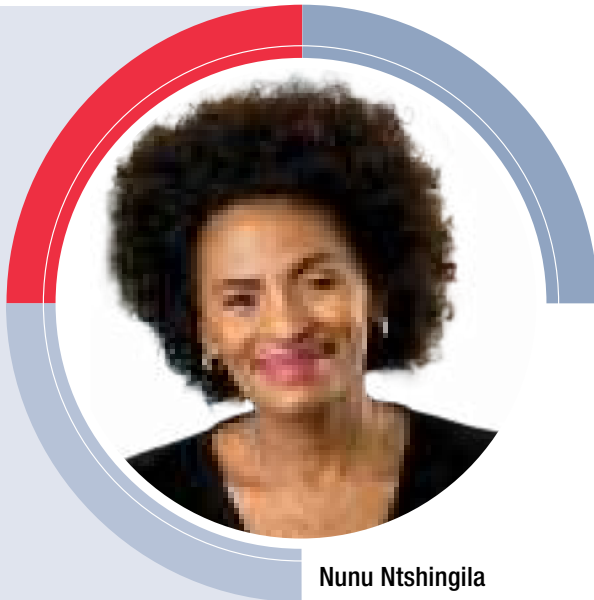
We are proud to present our 2022 Sustainability Report, which has adopted an interactive format and aims to provide a more immersive reader experience with the inclusion of a number of videos, through which our featured stories are brought to life, thus seeking to establish a more meaningful connection between our multinational and multicultural stakeholders across the globe. Our Sustainability Report also defines our strategic approach and policy imperatives, provides insight into the ESG opportunities, challenges and risks associated with our business, and highlights our sustainability performance at our key projects. We invite you to read and experience this report, and get to know our people and their stories.

Once again, we affirm our commitment to our host African nations and look forward to a bright future of shared prosperity.

Sincerely,

Nunu Ntshingila

Independent Director, Chair of Sustainability Committee and Member of the Compensation and Human Resources Committee



Nunu Ntshingila

We affirm our commitment to taking ESG seriously and applying its considerations to our strategic drivers, organizational practices, decision-making structures and stakeholder engagements.

Approximately **\$2.2 billion** of total value was created and distributed in 2022.

To our valued stakeholders

Beyond our commitment to ESG, mining with a greater purpose

Every year, thousands of mining professionals, operators and service providers converge in the warm glow of the Cape Town sunshine for the annual Investing in African Mining Indaba. A striking take-away from the 2023 Mining Indaba was the evident spirit of optimism and the underlying comradeship of an industry that must work together towards our shared global vision of a safe, just and sustainable world enabled by responsibly produced minerals and metals. Ivanhoe has participated in the Mining Indaba for more than a decade, but this year was momentous. Ivanhoe's 26-year odyssey of discovery has realized a globally significant copper complex essential for the just energy transition (see page 14).

When we set out to build the tier-one Kamo-a-Kakula Copper Complex, alongside our joint-venture partners at Zijin and the DRC government, we were resolute in our commitment to industry-leading standards in terms of resource efficiency, water and energy usage, and minimizing emissions. We knew that Kamo-a-Kakula had the potential to become an example of how modern mining must be done – in partnership with local governments and communities, and with an unwavering focus on transparency and ESG best practices.

Africa is not only blessed with world-class geology, but also with exceptional hydropower potential and abundant sunshine, that can pave the way for decarbonizing its mining industry. Like the existing Phase 1 and Phase 2 operations, future expansions of the Kamo-a-Kakula Copper Complex will be powered by clean, renewable hydro-generated electricity which is developed in public partnership with the DRC's state-owned power company La Société Nationale d'Électricité (SNEL). Ongoing refurbishment of Turbine 5 at the Inga II hydropower facility, scheduled for completion in Q4 2024, to align with the commissioning of the Phase 3 concentrator and smelter, will provide clean, green hydropower for Kamo-a-Kakula's next phase (see page 83). Meanwhile, at Platreef, Ivanhoe's first solar power plant is expected to begin supplying clean, solar-generated electricity to the mine in 2023 (see page 84).

Endowed with these natural resources, Africa also boasts a young, vibrant population of men and women that are ready to enter the workforce as the next generation of accomplished engineers, geologists and skilled technicians. Our projects have now generated over 14,000 jobs from their construction and operational activities. Local employment remains one of our key priorities, for example, over 97% of our full time employees at Kamo-a-Kakula are from the DRC. We will continue this excellent track record of local employment and training through initiatives such as our world-class training centers, skills development programs, and inclusion targets (see page 42 and page 57). We are now also championing the construction of the Kamo-a Centre of Excellence, which will create a sustainable and community-focused higher learning environment, offering international degrees and diplomas in the heart of the Lualaba Province in the DRC (see page 81).

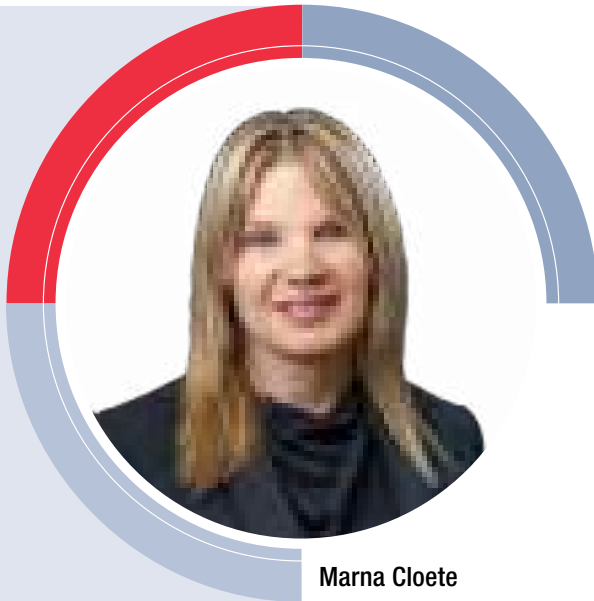
Ivanhoe's community development initiatives have succeeded in equipping communities with transformative infrastructure such as schools, health facilities and potable water access. They have also nurtured local businesses and value chains around the mining complexes, including sustainable agriculture and farming, and investments in early childhood education and gender equality. These initiatives have cemented and advanced our commitment towards achieving and contributing to the United Nations Sustainable Development Goals (see page 36).

I am immensely proud of all the dedicated employees and contractors responsible for these industry-leading initiatives. Mining remains a vital industry, and its role is only growing more important as we strive to decarbonize our economies and electrify the world. We must still mine, but when we do, we must mine responsibly and with a greater purpose.

Sincerely,

Marna Cloete

President



Marna Cloete

I am immensely proud of all the dedicated employees and contractors responsible for these industry-leading initiatives. Mining remains a vital industry, and its role is only growing more important as we strive to decarbonize our economies and electrify the world. We must still mine, but when we do, we must mine responsibly and with a greater purpose.

Our sustainability strategy, key priorities and approach to reporting

At Ivanhoe Mines our sustainability strategy is shaped through particular focus on our vision, purpose and principles. We have a business imperative to provide the critical metals that are needed for the just energy transition, but we seek to be trend-setters in our approach to mining. This is entrenched in our ethos of “mining with a greater purpose.”

Ivanhoe is committed to implementing standards of best practice that have been crafted based on international frameworks, principles, codes and programs (see page 4). Our approach to sustainability reporting is underpinned by the GRI Core Option Guidelines and in 2020 we adopted the framework of the WEF SCM against which to disclose our sustainability approach and performance. Aligned with the SDGs and principal ESG domains, this model encapsulates the vision for true stakeholder capitalism, organized into four highly interdependent, interlinked pillars – Principles of Governance, People, Prosperity and Planet – each of which has an important bearing on the capacity of the Company to generate shared and sustainable value. We work to support and contribute to the achievement of the UN SDGs and appreciate the need to focus our efforts where we can have the greatest impact. As such we are working towards embedding eight priority SDGs in our business strategy and processes, focusing on which are most actionable in our operational environments (see page 36).

Our sustainable development policies and goals are geared towards our commitment across these four pillars, covering a range of sustainability elements with our 2030 priorities for conscientious production, relationships and governance framed to deliver broad-based shared value.



IVANHOE'S 2030 SUSTAINABILITY PRIORITIES



A mine of the future, championing environmental stewardship

Environmentally conscious operations, targeting **net-zero emissions**, efficient water stewardship, **circular economy** waste practices and concurrent rehabilitation

Safely designed and operated, **low-impact tailings** storage facilities



Safe operations, targeting zero fatalities and a year-on-year reduction in lost time from incidents, as well as effective emergency response planning

Diversity and inclusion, targeting **gender** inclusion and participation across all organizational levels and in the supply chain

Social progress through **community development**, focused on the provision of access to water, access to education, community health, the enhancement of livelihoods and local procurement

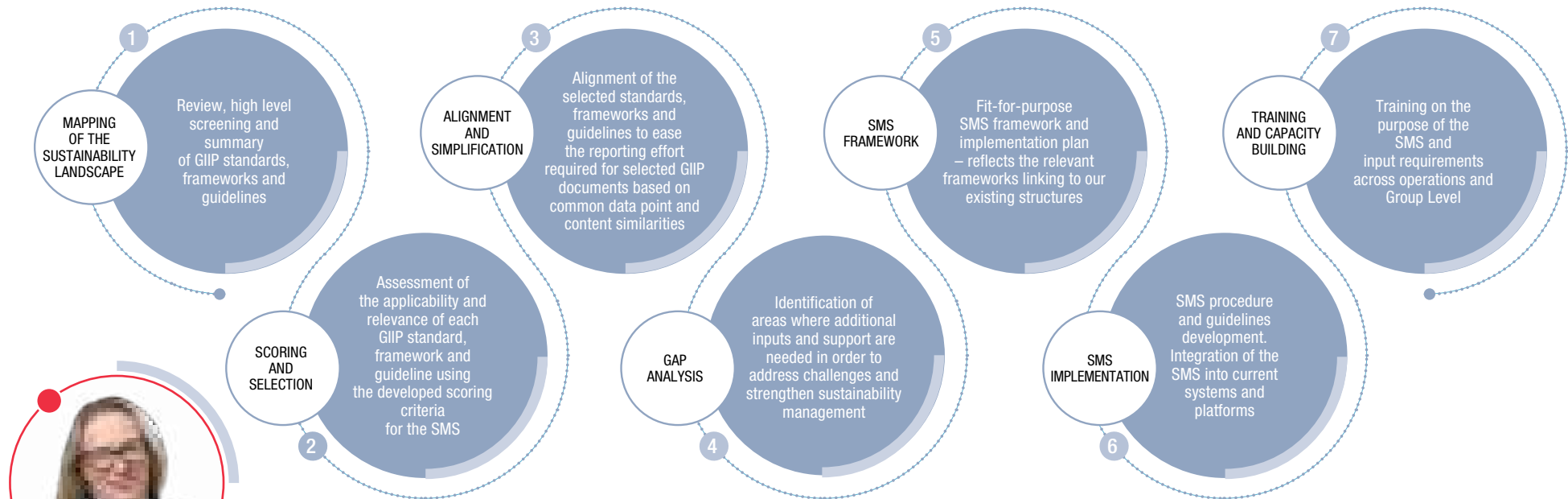


Ethical conduct through absolute compliance with our Code of Conduct and sustainable ESG practices across our **value chain**

Enhancing **transparency** through our membership affiliations and the expansion of verified ESG disclosures and index inclusion

A **social licence to operate**, maintained through ongoing stakeholder engagement, effective grievance management and the protection of human rights

Ivanhoe’s Sustainability Management System (SMS) Framework



“Our planet and society are currently facing the most significant challenges of all time. We are all responsible for building a sustainable, climate resilient future; and doing so requires us to adopt comprehensive, holistic management systems which acknowledge outward- and inward-looking impacts.”

JASMINE ABRAHAMS

Vice President,
Sustainability

Our sustainability strategy and the external factors that affect our performance and reporting are periodically reviewed and evaluated to consider the stakeholder views determined through our materiality assessment, as well as to measure performance in relation to our goals. Indicators, reporting processes, and data monitoring and assurance are key aspects to ensure alignment to best practice standards. These in turn rely on operational systems to manage, collate, report, and continuously improve on ESG indicators to provide our stakeholders with greater visibility on how we are working to fulfil our sustainability commitments.











The development of Ivanhoe’s bespoke Sustainability Management System (SMS) Framework progressed as planned during 2022 with a draft framework to guide sustainability management and reporting at both a Group and operational level currently undergoing review. A significant component of the SMS framework’s development involved the screening, review, and selection of relevant good international industry practice (GIIP) frameworks, standards, and guidelines. This process ultimately resulted in a selection of relevant or applicable GIIP documents guiding sustainability management. Interviews with heads of departments and personnel across our projects (Kamoa-Kakula, Platreef

and Kipushi) as well as in-depth reviews of existing policies, procedures, reports and other relevant documents formed the crux of the gap analysis. This yielded an understanding of the status quo of current ESG practices and structures, identified areas that require additional inputs and support to address challenges and strengthen sustainability management and reporting, and recognized opportunities for alignment across the operations to facilitate effective reporting to meet the requirements of the selected GIIP documents.

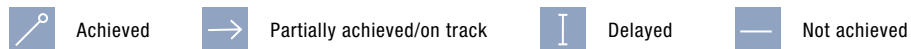
Drawing from these initial steps, the draft SMS framework was developed, using a systematic and iterative approach, to be fit-for-purpose and to reflect the relevant frameworks linking to Ivanhoe’s existing structures. Once approved, the SMS framework will be implemented through the Company’s IT systems, with specific focus on alignment and integration across operations making use of existing tools and mechanisms to fit seamlessly into what is already in use. We remain committed to continuously refine our approach, following inclusive and collaborative stakeholder engagement models, and to set targets that will enable us to achieve our long-term strategic objectives and priorities, truly equipping us as a positive “impact organization” with an enduring legacy in the areas where we operate.

Our 2022 sustainability objectives and targets





Our annual sustainability objectives and targets are devised from our corporate scorecard and inform our strategic direction on sustainability matters.

Governance 	Continuously improve sustainability performance and disclosures, specifically through:		
	– Participating in membership of the United Nations Global Compact;		Members of UNGC since June 2022.
	– Publishing the annual Communication on Progress (COP) disclosure;		First COP due in June 2023.
	– Publishing the 2021 annual Sustainability Report with assurance on a limited set of KPIs;		Report published on schedule, however, work towards assurance on a limited number of KPIs is ongoing.
	– Improving the percentile ranking in key ESG ratings;		Improvements across several ratings such as CDP climate score, but this work requires ongoing focus.
	– Achieve compliance with the Environmental and Social Action Plan (ESAP) (as compiled by independent specialist on behalf of lender group for equipment financing and stream funding for Kamo-a-Kakula and Platreef respectively) deliverables in accordance with IFC Performance Standards;		Actions required under Kamo-a ESAP completed with the next phase being ongoing monitoring from 2023 onwards. Revised Platreef ESAP agreed with the lenders for implementation in 2023.
People 	Achieve a target of Total Recordable Injury Frequency Rate (“TRIFR”) less than 3.28* for project safety using TRIFR as a measure which is calculated as the number of recordable injuries per 1,000,000 labour hours;	 *	TRIFR achieved better than target, however penalized due to Kamo-a-Kakula fatality (see page 54).
	Achieve a project safety target of Lost Time Injury Frequency Rate (“LTIFR”) less than 0.92* using LTIFR as a measure which is calculated as the number of lost time injuries per 1,000,000 labour hours;	 *	LTIFR achieved better than target, however penalized due to Kamo-a-Kakula fatality (see page 54).
	Implement culture and diversity interventions and progress the attainment of inclusion targets across all employment levels.		Numerous interventions in 2022, with continued focus in 2023, with this objective being carried through to the 2023 scorecard. Increase in female workforce by 1,1% (see page 42).

* An operations related fatality penalizes the health and safety rating



Prosperity 	Implement targeted enterprise and supplier development programs to meet local procurement obligations;		Numerous interventions in 2022, with continued focus in 2023, with this objective being carried through to the 2023 scorecard (see page 71).
	Completion of implementation of the livelihood restoration program (LRP) (Kamoa-Kakula and Platreef), as well as the establishment of the related LRP monitoring and evaluation program;		Kamoa-Kakula's LRP implemented and livelihood projects are well underway. Platreef is still finalizing agreements and proposed livelihood projects with the affected communities (see page 85).
	Water access program – expand potable water wells supply program around Kipushi through installing and equipping 10 new boreholes;		10 boreholes installed (see page 80).
Planet 	Obtain timeous approval for Environmental and Social Impact Assessment (ESIA) amendments for the Kamoa-Kakula Copper Complex;		ESIA for phase 3 obtained (see page 90).
	Obtain timeous approval for ESIA amendments for Platreef;		ESIA submission delayed due to an activist appeal. Now pending approval after submission on December 15, 2022 (see page 90).
	Conduct a GHG alternatives analysis for the Kamoa-Kakula Copper Complex, where CO ₂ emissions are projected to be above the 100,000 tonnes per annum threshold, including emissions from the facilities owned or controlled within the project boundary (Scope 1 emissions), and indirect emissions associated with the off-site production of energy used by the project (Scope 2 emissions);		Study complete and will be used to inform Ivanhoe's decarbonization roadmap (see page 100 to 102).
	Devise GHG emissions programs to reduce GHG emissions at the Kamoa-Kakula Copper Complex;		Study complete and will be used to inform Ivanhoe's decarbonization roadmap (see page 100).
	Devise and implement a well-crafted biodiversity project aimed at regenerating the natural ecosystem around the Project area of the Kamoa-Kakula Copper Complex;		Biodiversity action plan with biodiversity project nursery underway (see page 104).
	Commence construction of an on-site solar power plant at the Platreef Project;		Construction procurement commenced, local supplier used for headframes (see page 84).
	At the Platreef Project, establish an apiary as sanctuaries for pollinators by promoting natural habitation and plant diversity near the project area.		Apiary established and bees are thriving (see page 106).

 Achieved
  Partially achieved/on track
  Delayed
  Not achieved

Tracking our key metrics

Our key sustainability metrics are devised from our annual materiality assessment process and principal disclosure frameworks.

Pillar	Material impact	Key performance indicators	2020	2021	2022	Trend
Governance	Stakeholder engagement and grievance management	Number of engagements	772	633	605	
		Number of stakeholders engaged	10,861	10,645	15,484	
		Number of grievances	69	56	64	
People	Workforce*	Total workforce*	8,884	12,374	14,749	
		% women employees – employees	8%	9%	10%	
		% local employees	91%	97%	97%	
	Health and safety	Number of LTIs – employees	4	10	5	
		Work-hours free of a lost-time injury	5,618,429	7,357,563	13,435,706	
		Number of fatalities	5	1	1	
	Skills for the future*	Number of employees in programs for upgrading employee skills, including skills transfer related to succession planning	190	450	580	
Number of community beneficiaries in training interventions		976	1,884	1,320		
Prosperity	Employment and wealth generation	Total employee remuneration*	\$36,266,786	\$77,022,215	\$95,747,925	
		Total socio-economic development spend	\$10,942,873	\$9,500,052	\$19,659,490	
		Proportion of spend on local suppliers	\$401,610,000	\$776,638,163	\$1,211,757,180	
		Number of formal and informal local enterprises supported	53	66	332	
Planet	Environmental compliances	Number of environmental spills (non-significant)	2	5	1	
		Number of environmental spills (significant)	0	0	0	-
	Water and sanitation management	Water consumption	-12,734 MI	-5,794MI	-3,812MI	
		Nature loss (land use and ecological sensitivity)	Number and area (in hectares) of sites owned, leased or managed in or adjacent to protected areas and/or key biodiversity areas (KBA).	0 hectares	0 hectares	0 hectares
	Climate change, energy and GHG emissions	Renewable energy as a total of energy consumed	57%	38%	76%	
		Total GHG emissions (tCO ₂ e)*	34,194	106,770	67,043	

* Group-wide metrics



GOVERNANCE



UNGC Principles 1, 2, 4, 5, 10

- 23 videos reporting our SDG commitment and performance
- 15,484 stakeholders engaged
- 117 materiality assessment respondents
- Grievance mechanism platform launched at Platreef
- Ivanhoe Mines joins UNGC
- Ivanhoe Mines joins EITI
- Kamo'a's Human Rights Impact Assessment extended
- SDG awareness campaign in local schools at Platreef



Our 2022 performance at a glance



PEOPLE



UNGC Principles 3, 4, 5, 6

- 1,272 group wide new hires
- Ivanhoe's President featured in UK WIM100
- ~10% female employees
- 97% local employees
- 180 promotions
- 14,749 total workforce
- 14,609 health inductions
- 5,873 participants in Kamo'a's HIV-awareness campaign
- 580 employees in development initiatives
- 1,320 community beneficiaries in training interventions



PROSPERITY



UNGC Principles 1, 2, 10

- \$2,2 billion total value created and distributed
- Kamo'a-Kakula contributed approximately 4% DRC GDP
- Kamo'a's sustainable livelihoods program SROI \$1:\$11
- 107% increase in socio-economic spend
- 644 scholarships and bursaries
- 19 categories ring-fenced for suppliers
- 17 enterprises graduated to Platreef's supply chain
- 325 formal local enterprises supported
- Kamo'a Centre of Excellence commenced construction
- 48% increase in students enrolled at Muvunda Primary School



PLANET

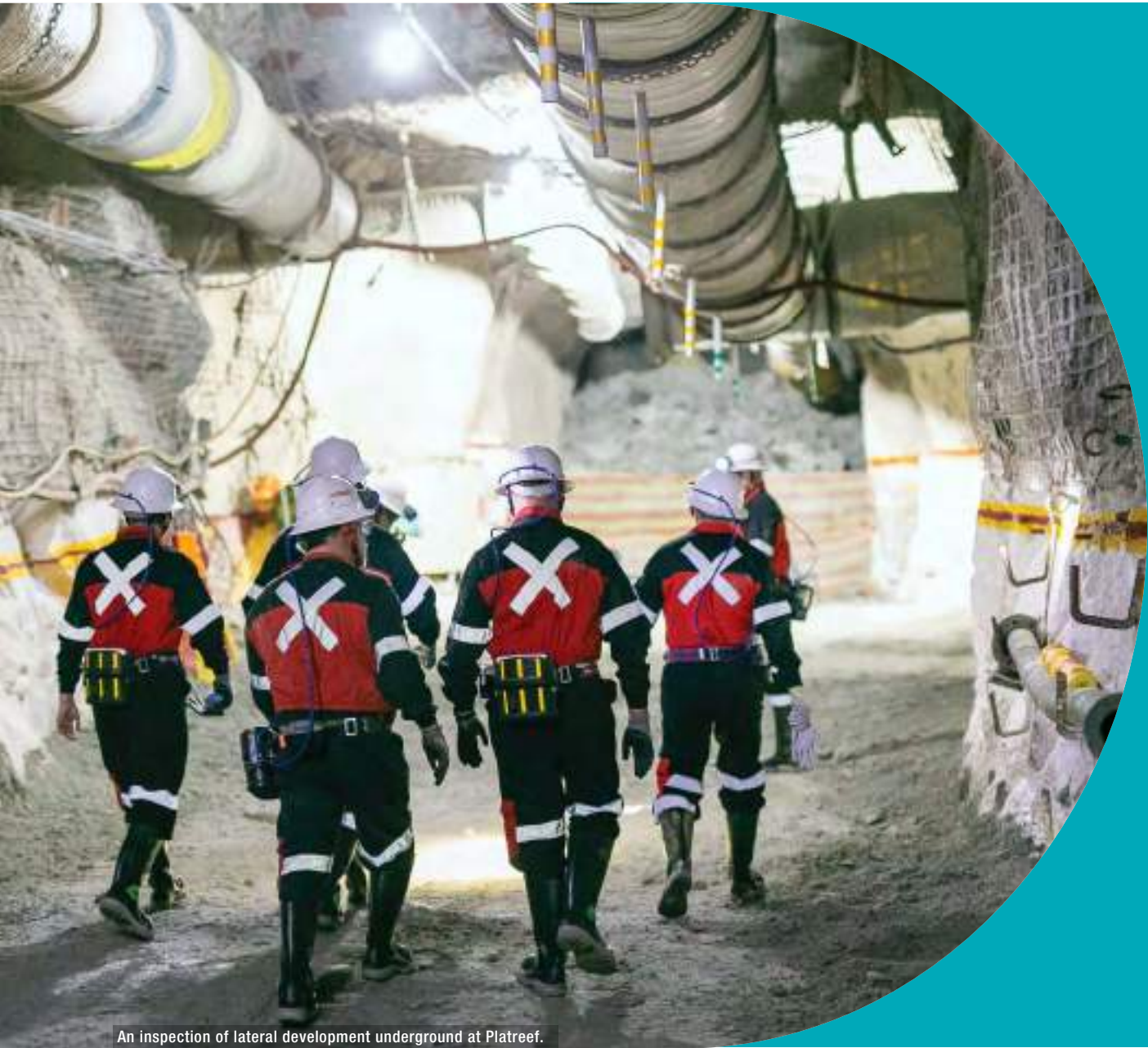


UNGC Principles 7, 8, 9

- No material environmental incidents
- ESIA amendment for Kamo'a's Phase 3 approved
- ESIA approved for Kipushi Project
- Kipushi's water pump SROI \$1:\$21
- Platreef solar-power project initiated
- 100% renewable Scope 2 emissions at Kamo'a-Kakula
- 100% renewable Scope 2 emissions at Kipushi
- 100% paper and metal waste recycled at Platreef
- Apiary project launched at Platreef



Rachelle Museka, Mill Operator, Linda Malumba, Senior Operator Larox and Fancy Katuma, Sand Filter Operator at Kamo'a-Kakula Copper Complex.



2

OUR BUSINESS AT A GLANCE

Ivanhoe Mines is committed to contributing towards a better world by promoting global prosperity, increasing resilience in local communities and preserving ecosystems through discovering, developing and responsibly operating mines. We acknowledge that sustainability is fundamental to all phases of our operations from exploration to closure and post-closure. We therefore assess potential impacts and risks associated with our activities across the entire lifecycle of our projects and operations.

An inspection of lateral development underground at Platreef.



Our Company and the metals to fuel the just transition

Ivanhoe Mines is a mineral exploration and development company seeking to build a leading global, commodity-diversified mining and exploration company producing many of the metals that the world urgently needs for cleaner air and water, and a low-carbon future. We are operating and developing world-class mines, which creates value for shareholders by earning profit, and creates shared value for society by investing in infrastructure and contributing to inclusive economic growth and sustainable jobs, paying tax and advancing economic and social conditions of our local communities.

Metals and minerals are vital components of clean energy technologies – from wind turbines and electricity networks to electric vehicles. As calls for decarbonization continue to drive global economies and clean energy transitions gather pace, the demand for these crucial metals and minerals is set to increase. War and geopolitical instability have had an overarching effect on the global economy due to global supply chain disruptions, higher energy prices, geopolitical turmoil and an unrealized energy transition away from carbon-intensive sources. With electrical power grids becoming increasingly unreliable, a copper shortage could derail the energy transition. There is a need to produce more copper in order to achieve net-zero emissions by 2050.



Copper

Copper, the cornerstone of the energy transition, with its superior electrical and thermal conductivity, is vital for building the world's next generation of renewable technology. As the 'metal of electrification', its use in zero-emission electric vehicles, solar power, wind power and hydro-power will increase its demand as the energy transition accelerates. Copper, which is naturally antibacterial, is also known to kill viruses and superbugs. It is now used in hospitals to coat bed rails, call buttons, intravenous drip poles, taps and door handles. It also inhibits the spread of harmful bacteria in water and air distribution systems. Copper can be 100% recycled without any loss in performance.

Nickel

Nickel is a key metal needed for electric-vehicle batteries. There is a growing market realization that the new era of electric vehicles will be a disruptive, long-term force that will have a material impact on nickel demand. Nickel is also used in a number of components in wind turbines.



Platinum group metals (PGMs)

Platinum is vital for zero-emission and hydrogen fuel cell technology. **Platinum, palladium and rhodium are also critical metals used in vehicle pollution-control devices** where they help turn toxic pollutants into less-harmful carbon dioxide and water vapour.

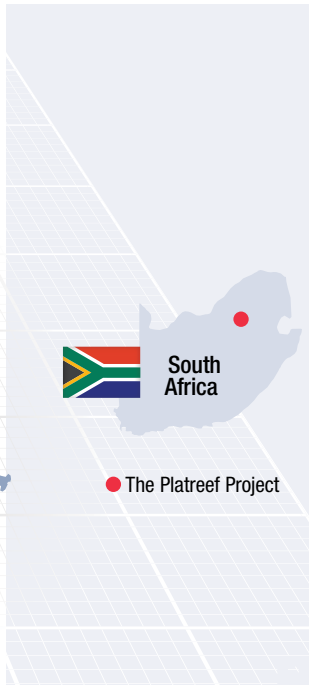
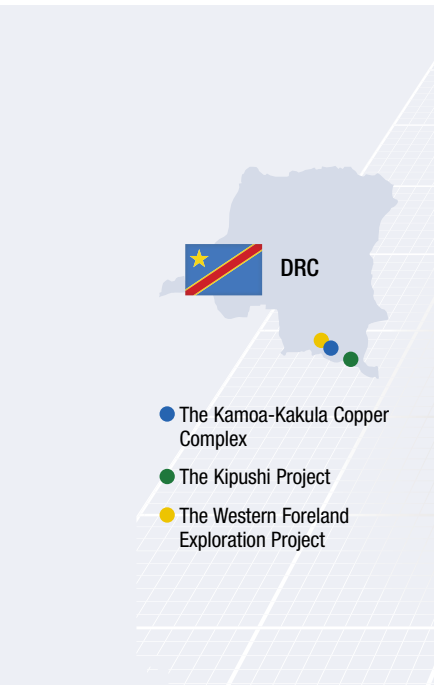
Zinc

Zinc's role in the energy transition is in solar panels and wind turbines. Zinc is 'environmentally friendly' in that it can be recycled indefinitely, has a long lifespan and is beneficial in construction. Zinc is also an essential micronutrient that is crucial for growth and brain development, and helps fight dangerous infections, especially in children. Zinc is most commonly used for coating of other metals to protect them from corrosion, including solar panels and turbines, particularly offshore. It is also an important ingredient in fertilizer.



Indication of Kamoakakula high grade ore.

Through our portfolio of assets in Southern Africa, Ivanhoe Mines is perfectly poised to be a long-life, responsible producer of metals required for the just transition, which the world needs desperately for global decarbonization and the electrification of its economy.



Our principal projects

IN PRODUCTION

FIRST PRODUCTION Q3 2024

FIRST PRODUCTION Q3 2024

EXPLORATION

The Kamoia-Kakula Copper Complex

The Kamoia-Kakula Copper Complex, in **DRC's Central African Copper Belt**, is approximately 25 kilometres west of the town of Kolwezi. Kamoia-Kakula began producing copper in May 2021 and has since undergone multiple phases of expansion. The ongoing Phase 3 expansions, will soon place Kamoia-Kakula as one of the largest copper complexes in the world.

39.6% owned

39,6% Zijin Mining
0,8% Crystal River
20% DRC Government

The Platreef Project

The multi-generational Platreef palladium-rhodium-nickel-platinum-copper-gold project is located on the **Northern Limb of the Bushveld Igneous Complex in Limpopo Province, South Africa**. The Project's high grade, thick 'Flatreef' deposit is expected to become one of the world's largest PGM mines via phased expansions. First production from Phase 1 is expected in Q3 2024.

64% owned

10% Japanese Consortium
26% Broad-based Black Economic Empowerment Partners

The Kipushi Project

The historic Kipushi zinc-copper-germanium-silver-lead mine, also in **DRC's Central African Copperbelt**, is approximately 30 kilometres southwest of the provincial capital, Lubumbashi in the southern Haut-Katanga province. The restart of the Kipushi Mine is expected to take place in Q3 2024 and once in production is expected to be world's highest-grade major zinc mine.

68% owned

32% La Générale des Carrières et des Mines (Gécamines)

The Western Foreland Exploration Project

The Western Foreland Exploration Project in the DRC, adjacent to the Kamoia-Kakula Copper Complex, consists of 17 exploration licences that cover a combined area of approximately 2,407 square kilometres. Exploration continues to play a key role in the Company's business strategy, primarily at the highly prospective Western Foreland Exploration Project.

90 – 100% owned

The Kamo-Kakula Copper Complex

The Kamo-Kakula Copper Complex, a joint venture between Ivanhoe Mines, Zijin Mining and the DRC, has been independently ranked as the world's fourth-largest copper deposit by international mining consultant Wood Mackenzie.

Kamo-Kakula Copper Complex's Phase 1 concentrator began producing copper in May 2021 and achieved commercial production on July 1, 2021. The Phase 2 concentrator, which doubled nameplate production capacity, was commissioned a little under 12 months later in April 2022. The operations are currently undergoing a Phase 3 expansion, which includes the construction of an on-site smelter, as well as a future Phase 4 planned later in the decade. The current life of mine following both phased expansions is 42 years, as outlined in the independent 2023 Integrated Development Plan (2023 IDP).

Highlights

Kamo-Kakula 2023 IDP projects a staged increase in nameplate production capacity to a total of

19.2 Mtpa

over a 42-year mine life

333,497 tonnes

of copper produced in 2022

215% increase

compared with 2021, upper end of 2022 guidance

Phase 1 and Phase 2 debottlenecking project to increase throughput to

9.2 million tonnes

of ore per year

Processing capacity of more than

14 Mtpa

following the commissioning of Phase 3, expected by the end of 2024

Smelter

100-hectare smelter complex being constructed adjacent to the Phase 1 and Phase 2 concentrator plants. This direct-to-blister flash smelter will incorporate leading-edge technology supplied by Metso Outotec of Espoo, Finland and is designed to meet the International Finance Corporation's (IFC) emissions standards. Striving for a minimal environmental impact, by-product sulphuric acid will be sold to local DRC mining operations.

Hydropower

Like the existing Phase 1 and Phase 2 operations, the Phase 3 expansion of the Kamo-Kakula Copper Complex will be powered by 178MW of clean, renewable hydro-generated electricity following the refurbishment of Turbine 5 at the Inga II dam. The refurbishment is in partnership with Inga II's owner, SNEL, DRC's state-owned power utility. Kamo-Kakula is also evaluating additional sustainable power options for its future Phase 4 expansion.

Phase 3

Phase 3 includes a new 5.0-Mtpa concentrator that is located approximately 10 kilometres north of the Phase 1 and 2 concentrators. Phase 3 mining areas will be accessed through the twin declines of the Kamo 1 and Kamo 2 underground mines, involving the same mechanized drift-and-fill mining methods employed at Kakula. Expected to commence at Kamo 1 in 2023 and Kamo 2 in 2025.

Tailings

Approximately half of Kamo's tailings will be pumped back underground and used to backfill Kamo-Kakula's mined-out stopes. Kamo's tailings storage facility (TSF) has been assessed against the Global Industry Standard on Tailings Management, with key findings being addressed in 2023.

Kamo-Kakula continues to work alongside its offtake partners, Zijin Mining, CITIC Metal and Trafigura, as well as the government of the DRC, on initiatives aimed at both reducing the ESG-related risks associated with and optimizing the **transportation** of Kamo-Kakula's products, including working with offtake partners, logistics service providers and local entrepreneurs.



The Kamo-Kakula Copper Complex.

The Platreef Project

Since 2007, Ivanhoe has focused its exploration and development activities on defining and advancing the down-dip extension of its original discovery at Platreef, now known as the Flatreef Deposit, which is amenable to highly mechanized, underground mining methods.

The independent 2022 feasibility study for the Platreef Project (Platreef 2022 FS), envisions a two-phased expansion up to a steady-state production rate of 5.2 Mtpa. With Shaft 1 complete and hoisting development rock from underground since Q2 2022, Ivanhoe is focusing its construction activities on bringing Phase 1 of the Platreef Project into production during Q3 2024. The subsequent Phase 2 expansion is expected following the completion of Shaft 2 in 2027. Phase 2 will consist of two 2.2 Mtpa concentrators completed in 2028 and 2029, thereby increasing the steady-state production rate to 5.2 Mtpa. Life-of-mine cash costs, as per the Platreef 2022 FS, are expected to be \$514 per ounce of palladium, rhodium, platinum, and gold (3PE+Au), net of by-product nickel and copper credits. This will therefore rank Platreef as the industry's lowest cost primary PGM producer.

Highlights

Initial
700,000 tonnes
per annum underground mine

113,000 oz
of 3PE+Au, 5 million pounds
of nickel and 3 million pounds
of copper average annual
production in Phase 1

591,000 oz of 3PE+Au,
26 million pounds of nickel and
16 million pounds of copper
average annual production in
Phase 2

Mineral Resource base
of 95 Moz 3PE+Au, plus
2.7 Mt of nickel, makes Platreef
**the largest precious
metals project
under development
by far**

Renewable power

Commissioning of Platreef's first solar-power plant is planned for 2023. The solar-generated power from the plant will contribute to mine development and construction activities, as well as to charging Platreef's battery-powered underground mining fleet.

Dust trucks

Water trucks are used to mitigate the risk and impact of dust fall around the operational area.

Bulk water

Construction of the Masodi Wastewater Treatment Works plant is progressing ahead of its scheduled completion in mid-2023. In exchange for funding the completion of the Masodi waste water facility, Platreef has obtained the rights to receive its treated municipal waste-water. An extension of the existing southwest fence servitude, as agreed with the Kgobudi community, will cater for the pipeline between Platreef and the plant.

Waste rock

Waste rock from this stockpile is crushed and re-used for construction activities.

Bulk power

Final agreements for the 100 megavolt-amperes (MVA) power supply from Eskom, the South African public electricity utility, were signed during Q2 2022 and the construction permit received. The application for the associated environmental authorization is pending approval by the regulator. Extensive community engagements were conducted to obtain consent and cooperation from the affected communities for the powerline servitude.

Tailings

Approximately half of Platreef's tailings will be pumped back underground and used as to backfill mined-out stopes. The remainder will be deposited in a dry-stack tailings storage facility.



The Platreef Project

As the site ramps-up activities, gearing for production in 2024, a permit application has been submitted for a Phase 3 grave relocation process to move all graves remaining on the project area. A livelihood restoration plan is also underway, working towards the removal of all livestock remaining within the fenced-off project area.

The Kipushi Project

According to Wood Mackenzie, a leading, international industry research and consulting group, Kipushi’s exceptional zinc grade is more than twice that of the world’s next- highest-grade zinc project.

Kipushi will be the world’s highest-grade major zinc mine, with an average grade of 36.4% zinc over the first five years of production. On February 14, 2022, Ivanhoe Mines announced the positive findings of an independent feasibility study for the planned resumption of commercial production at Kipushi focusing on the mining of Kipushi’s zinc-rich Big Zinc and Southern Zinc zones, with an increased resource base compared to the pre-feasibility study, extending the mine life to 14 years. Envisioning the recommencement of underground mining operations based on a two-year construction timeline, the principal development activity entails the construction of a conventional concentrator facility and new supporting infrastructure on surface.

Highlights

Estimated **11.8 million tonnes**
of Measured and Indicated Mineral Resources grading 35.3% zinc

800,000 tonnes
per-annum underground mine and concentrator

Life-of-mine average zinc production of
240,000 tonnes
per annum, with a zinc grade of 32%

Existing surface and underground
infrastructure allow for significantly
lower capital costs
than comparable development projects

Expected to rank in the
second quartile
of the cash
cost curve
for zinc producers globally

Concentrator plant

Construction work is progressing on the concentrator plant, scheduled to be complete by Q3 2024.

Main production shaft

Shaft 5 (P5) is planned to be the main production shaft with a maximum hoisting capacity of 1.8 Mtpa, providing the primary access to the lower levels of the mine, including the Big Zinc Zone, through the 1,150-metre haulage level. Mining will be performed using highly productive, mechanized methods and cemented rock fill will be utilized to fill open stopes.

Tailings

The re-establishment of operations at the Kipushi Project requires the construction of a new tailings storage facility. The ultra-high grade nature of the Kipushi ‘Big zinc’ orebody, with average grades of 35% zinc means that only approximately 65% of the ore processed is deposited as tailings. This is one of the lowest rates of tailings generation for a base metal mining operation in the world.

In 2022, Kipushi Holding and Gécamines signed a new agreement to return the ultra-high-grade Kipushi Mine, which operated between 1924 and 1993, to commercial production.



The Kipushi Project

The Western Foreland Exploration Project

Using models that successfully led to the discoveries of Kakula, Kakula West, and the Kamoia North Bonanza Zone on the Kamoia Copper SA mining licence, Ivanhoe’s DRC exploration group is targeting Kamoia-Kakula-style copper mineralization through a regional exploration and drilling on its Western Foreland exploration licence.

The 17 licences in the Western Foreland cover a combined area of approximately 2,407 km² to the north, south and west of the Kamoia-Kakula Copper Complex, covering a strike length of approximately 175 km.

The exploration team is composed of a mixture of the same exploration geologists responsible for the previous discoveries and others with experience in the greater Copper Belt, using a variety of exploration technologies and techniques, such as air core drilling, ground gravity surveys, airborne gravity surveys, seismic surveys, and diamond drilling.

Access

Construction of the access spine road across the western permits now has a total length of 69.4 km. Container based bridges were installed along the entire length of the road to provide all season access to the full extent of the southwest foreland. Some additional wet season access roads were completed to allow additional drilling during the wet season.

New Resolution Geophysics (NRG) conducting airborne electro-magnetic survey on Ivanhoe’s exploration area, near Kakula.



The Western Foreland Exploration Project



3

OUR GOVERNANCE

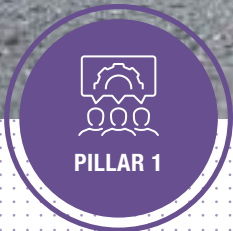
■ We are committed to strong governance – corporate integrity, transparency and accountability. We believe that the long-term success and viability of our organization is founded in the principles of agency, accountability and responsible stewardship. Ivanhoe Mines strives to maintain the highest standards of ethics, corporate governance, honesty and accountability, as directed by our Code of Business Conduct and Ethics, while pursuing the underlying business objective of building long term, shared value for all our stakeholders.

Mark Farren, Chief Operating Officer, and Tadeu Carneiro, Lead Independent Director, during a site visit at Kamoā-Kakula.



Alignment with the UN SDGs

Members of Ivanhoe Mines' Board of Directors and senior management; together with Kamoā-Kakula's senior management team during a site visit at the Kakula Mine.



Over 600 stakeholder meetings

Robust materiality assessment

Comprehensive Code of Conduct

Annual ESTMA reporting

Human rights training for security personnel

Ongoing human rights due diligence at Kamoā-Kakula

Continued focus on eight priority SDGs

Our commitment and approach to sustainability governance

Robust processes

We have established a Code of Business Conduct and Ethics, and implement a strict policy framework to ensure robust corporate governance processes, which employees are also trained on. In seeking to align with the WEF’s ‘Principles of Governance’ pillar, Ivanhoe Mines seeks to ensure that its governance model and processes play a central role in, and serve as the cornerstone for providing effective oversight of the Company’s activities; identifying and managing risk and opportunity; making decisions; setting our purpose and strategy; and adding to the Company’s competitive advantage – holistically and ethically.



Platreef employees celebrating the launch of Ivanhoe’s interactive employee and grievance management portal, *Hello Neighbour*.

Embedding ESG

While our governance approach is informed by our stakeholder commitments, as well as country-specific regulatory requirements, we appreciate the value of truly embedding ESG into our strategy, culture, processes and operations, thereby contributing to international developmental agendas such as climate change, the just transition and the 2030 Agenda for Sustainable Development.

Effective board

We are committed to building and maintaining an effective, diverse and appropriately skilled Board and to providing our Board with adequate information and tools to equip them to fulfil their mandate.

Meaningful engagement

Acknowledging the interplay between good governance, sound corporate citizenship and our social licence to operate, we are committed to maintaining an “open-door” approach and effective stakeholder engagement strategies and practices, which enable a reciprocal understanding of activities and priorities with our stakeholders. We are committed to ensuring that the right of access to information is respected and that effective feedback and grievance mechanisms that help us to understand and address our stakeholders’ concerns are maintained.

Respect for human rights

We appreciate that organizations have a responsibility to respect human rights, as well as to identify, prevent, mitigate and remediate any negative human rights impacts arising from our activities or business relationships, whether caused directly or indirectly. We are committed to taking a proactive approach to human rights considerations in our operations and across our value chain, including through embedding human rights due diligence processes as part of our operational approach.

Governing body

We are committed to assembling a strong and effective Board of Directors (the Board), comprised of women and men of differing ages, diverse cultures and professional backgrounds, with a broad-range of skills and experience. Ivanhoe Mines' stewardship and governance is the responsibility of our Board, which promotes Ivanhoe's performance, productivity and success for the benefit of all our stakeholders and determines the purpose, vision and associated strategic direction of the organization.

The Board fulfils its mandate either directly or through delegation to its committees at regularly scheduled meetings or as required.

As of December 31, 2022, our Board is comprised of 11 members, six which are considered independent.

The Board has five standing committees. Comprehensive details of the committee charters and the qualifications of the committee members can be found on the Company's website.

The Board regards ESG as a cross-functional discipline encompassing a wide range of issues, making it relevant to the functions of all committees. The committees work together with management to identify ESG issues most pertinent to the Company's business and its key stakeholders, and help the Board develop the policies and processes to integrate ESG into the Company's long-term strategy and risk management responsibilities. A more detailed discussion of our approach to corporate governance and the activities of the various Board committees can be found in the Company's most recently filed management proxy circular, which can be found on the Company's website.

Many of the aspects and performance disclosures covered in this Sustainability Report fall within the ambit of the Sustainability Committee. The Sustainability Committee is primarily responsible for establishing and overseeing our sustainability and ESG risks and opportunities, practices, policies, performance and disclosures across a number of areas such as climate governance, health, safety and well-being, human rights, responsible sourcing, and local economic development. The Sustainability Committee reviews our business and sustainability strategies and activities at least twice each year.



Members of Ivanhoe Mines' Board of Directors and Executive Management during a site visit at Kamao-Kakula. Robert Friedland, Founder and Executive Co-Chairman (front left), Miles Sun, Non-Executive Co-Chairman (front middle), Mark Farren, Chief Operating Officer (back left), Manfu Ma, Director and Chair of the Technical Committee (back middle), and Jeremy Lyu, Project Manager: Project Investment (back right).

During 2022, the Sustainability Committee held three meetings which dealt primarily with matters related to the corporate ESG strategy, policies, performance and reporting, as well as the Committee's operations and performance. The Committee also conducted an informative engagement session and considered an expert presentation on the potential impacts of artisanal and small-scale mining in different jurisdictions.

The Board, while retaining ultimate responsibility for all matters relating to the Company and its business, delegates the responsibility for managing the day-to-day affairs to the executive management committee and other senior management personnel. In discharging this responsibility, the Board retains a supervisory role and oversees and monitors significant corporate plans and strategic initiatives, including quarterly budget reviews and approvals, and discussions with management relating to strategic and budgetary issues. At least one meeting per year is devoted substantially to the review of strategic plans proposed by management. The executive committee is responsible for implementing strategy as approved by the Board, as well as the management of risks and the determination of

Company priorities relating to our principal economic, social and environmental impacts, risks and opportunities.

Our President chairs the executive committee and bears the ultimate management responsibility for sustainability together with the Executive Vice President, Sustainability and Special Projects. Sustainability is regarded as a cross-functional discipline and the Executive Vice President, Sustainability and Special Projects is also responsible for convening and coordinating employees in other corporate functions or business units to support programs or activities that reinforce Ivanhoe's focus on ESG matters. We have a dedicated corporate sustainability team, headed by the Vice President, Sustainability, which interfaces with the project sites and oversees operational implementation of the Company's sustainability requirements.

Ivanhoe's sustainability strategy is integrated into decision-making by embedding it into executive performance and remuneration, as well as into corporate and operational annual key performance areas (KPA's), weighing 15% of the total scorecard. It is also filtered down into our project scorecards, as well as the annual KPA's of senior management personnel and various other personnel as may be required.

Ethical behavior

Our Code of Business Conduct and Ethics (the Code) underpins our governance approach and guides everything that Ivanhoe does.

Ivanhoe Mines is committed to embedding a culture of ethical conduct, shaped by exemplary leadership and governance, policies and site-level procedures and plans. We have implemented governance mechanisms and corporate policies to adhere to the highest standards of business integrity and ethics. These controls allow us to embed our approach to sustainable development in the way that we work, from leadership through to all levels of our organization, as well as to our consultants, advisors and contractors.

We have also established broad-based communication and training programs to ensure that all individuals working on our projects take cognizance of how they conduct their duties in compliance with the Code. All employees are further required to affirm their commitment to the Code on an annual basis. We ensure that the Code is included as part of contractual agreements with our consultants, advisors and contractors. Non-adherence to the Code for employees may lead to disciplinary action up to and including termination of employment. For contractors, it may lead to the termination of their contracts. The Code is regularly reviewed to ensure that it remains on par with industry standards, regulatory developments and our operating environment.



The Code sets out:

- Ethical standards with which everyone is required to comply;
- Our commitment to a culture of honesty, integrity, accountability and respect for the environment and communities in which we operate;
- Governance for interactions with third parties;
- A requirement of compliance with all applicable laws;
- Procedures for the disclosure of any relevant conflicts of interests;
- Principles for always acting in the best interests of the Company;
- Requirements for conducting all dealings in an honest and ethical manner;
- Provisions governing the confidentiality of information;
- Limits on the offering or acceptance of gifts or entertainment and;
- Guidance on the appropriate use of the Company's property.



Appointment of new Judicial Police Officers for Kamoia during an oath ceremony. Riaan Vermeulen, Managing Director, shaking hands with the magistrate who presided over the ceremony, appointing these officers to act on his behalf for the investigation of crimes.

Pursuant to our commitment to integrity, we have established an anonymous whistleblowing system, overseen by the Audit Committee, and encourage our colleagues and stakeholders to raise concerns or report actual or suspected violations of law or policies.

We also provide internal grievance mechanisms at all our places of business, as well as external grievance mechanisms at our projects.

Strengthening transparency

The Canadian Extractive Sector Transparency Measures Act (ESTMA), requires mandatory reporting of payments made to foreign and domestic governments by all Canadian participants in extractive industries (mining, oil and gas). Ivanhoe Mines discloses our taxes, royalties and other payments made to governments on a country-by-country and project-level basis in our annual ESTMA reports.

Ivanhoe Mines supports the implementation of the Extractive Industries Transparency Initiative (EITI) Standard in the DRC. In 2022, Ivanhoe Mines formally joined the EITI, pledging support for the overarching goals of the EITI and endorsing its 12 principles. In 2023, Ivanhoe will actively participate in the EITI validation process. By being an EITI signatory, we hope to contribute to an improved business environment and reduced political risk in the EITI-signatory countries where we operate.

Our risk management

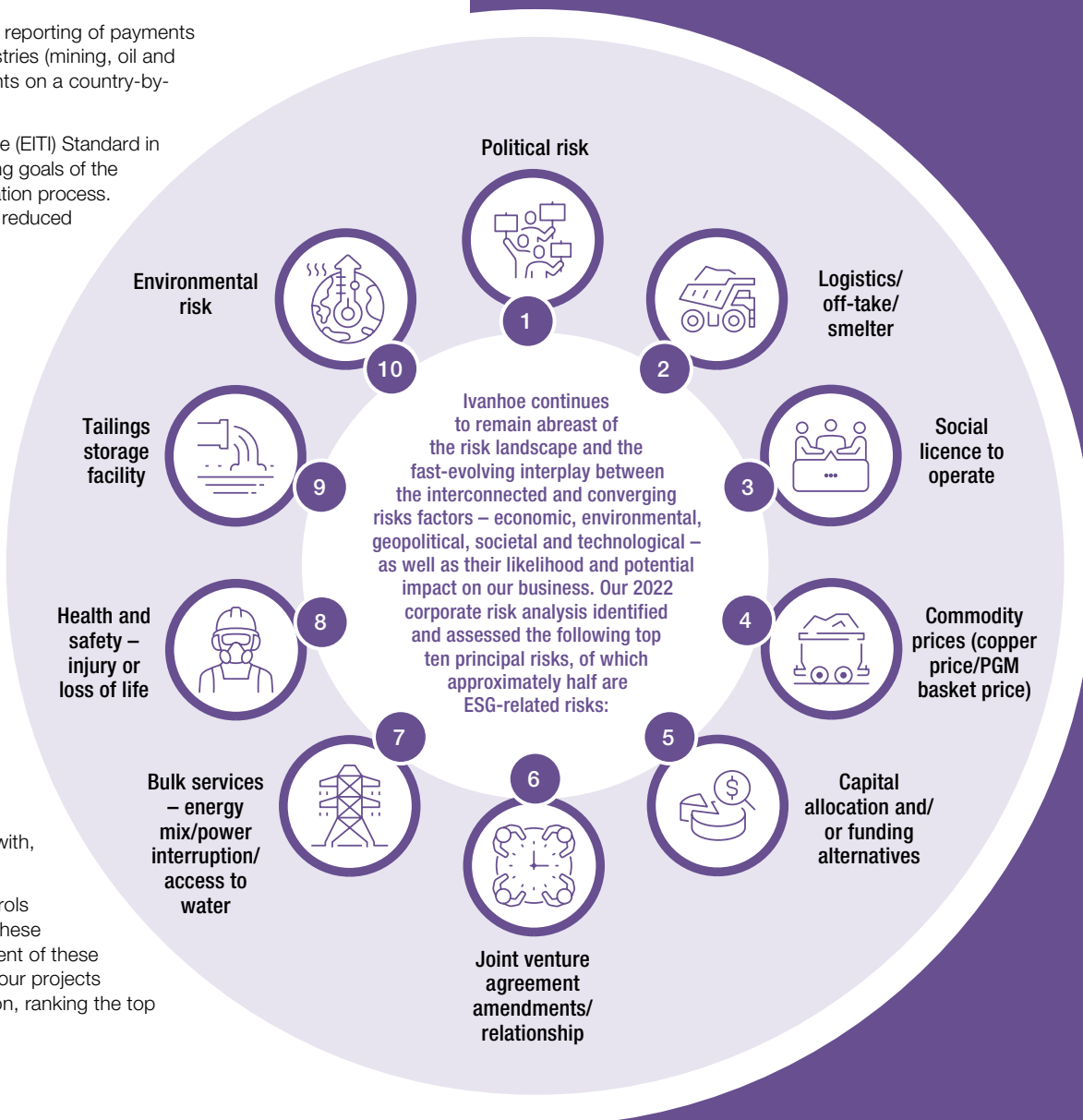
The growing importance of ESG matters to stakeholders necessitates a coordinated approach to managing and reporting these issues to the Board, as well as to identifying and monitoring the associated risks. Various stakeholders – across the investor, lender, shareholder, customer, worker, community and civil society groups – are increasingly embracing the ESG agenda. They are calling for companies to take more responsibility for their impacts on communities and operating in natural environments. Consequently, a company’s response to the impact of its operations on ESG will inform its relationships with stakeholders.

The successful delivery of Ivanhoe’s strategic objectives depends on effectively identifying and understanding our stakeholder base and their needs and expectations, as well as identifying, monitoring and mitigating our risks while prioritizing any associated opportunities.

The Board reviews the principal risks from and to our business, including financial risks, through regular reports from management. It reviews operations and relevant risk issues at each Audit Committee and Board meeting and discusses with management the systems in place to manage those risks. The Board also assesses the integrity of internal financial controls and management information systems directly and through the Audit Committee. Certain responsibilities have been delegated to the Sustainability Committee, including the review of our safety, health and environmental policies and compliance therewith, and oversight of our sustainability performance and risks.

Ivanhoe has an established risk management framework and wider system of internal controls which both connect our Board and group-level risk oversight to site-level risk ownership. These systems and controls also responsibly inform our decision-making in support of management of these risks in pursuit of sustainable and resilient development. Site-level risk registers at each of our projects are updated quarterly and submitted to executive management for review and consideration, ranking the top risks for presentation to the Audit Committee.

Our principal risks



MATERIAL TOPIC

Our strategic stakeholder management



Lisl Pullinger, Vivid Consulting, engaging with Jabulane Manganyi, Community Relations Assistant and Mafamane Nkuna, Community Relations Practitioner, during the launch of Ivanhoe's interactive employee and grievance management portal at Platreef.

We are committed to achieving and maintaining social acceptability, or a social licence to operate. It is imperative that our site teams liaise and communicate with local communities from the outset to prevent challenges and adverse impacts that may arise during the project life cycle.

We are committed to constructive collaboration underpinned by transparent and ongoing dialogue, truly listening and meaningfully responding to build long-term stakeholder relationships based on deep, sustained trust and mutual respect.

We are committed to accessibility through an open-door policy, which affords our local stakeholders the opportunity to engage with any of our management, personnel or teams. We learn from continuous engagement with our stakeholders which guides the Company's long-term strategy and decision-making, ensuring outcomes based on more reflective stakeholder views and input.

We are committed to transparency through our active presence in communities and by sharing information broadly by liaising with national, regional, local, and community stakeholders – focusing on aligning the challenges between all stakeholders and addressing concerns in a more efficient and effective way where all involved stakeholders have a pertinent voice and information is shared timeously and equally, thereby defusing potential misinformation and mistrust.

We are committed to developing site-based Stakeholder Engagement Plans (SEPs) that aim to provide a structured framework for the stakeholder identification and engagement process and to ensure that we remain open and accountable for our actions, targeting direct engagement with local stakeholders at each of our projects. We are committed to regularly updating our SEPs to align with the growth of our stakeholders, in and around our mine sites, as well as their changing needs and changes in international stakeholder engagement principles.

We are committed to attaining the overarching goal of free, prior and informed consent and adopting engagement principles that meet international standards as determined in the Equator Principles (Equator Principles, 2020), IFC Performance Standards (IFC, 2012), best-practice guidelines for stakeholder engagement as prescribed by the International Association for Public Participation (IAP2, 2004) and the ICMM Principles.

We are committed to a stakeholder engagement approach that is underpinned by Ivanhoe's key engagement principles which may be found on page 35 of our 2021 Sustainability Report.

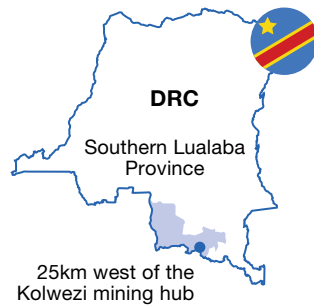
We are committed to maintaining thorough records of our stakeholder engagement so that we are able to effectively record, manage and track any issues, ensuring that concerns are timeously addressed. We currently use a group-wide, web-based electronic system, which enables the digital assignment of tasks, as well as provides data for trend analysis.

Stakeholder mapping and engagement

Our stakeholders are people, communities, organizations, and governmental departments or agencies, interested or concerned in, or affected by, our mission, strategy, operations and actions.

They may be internal – such as our workforce – or external – such as shareholders, communities (including local residents and traditional authorities), artisanal miners, our investors or analysts, our joint partners, our suppliers, our customers, our host governments or non-governmental organizations (including civic groups and youth organizations). Each of our projects has a unique project footprint with distinctive geological characteristics, geographical settings and key stakeholder groups. Each project has a team dedicated to stakeholder relations. We respect and value all of our stakeholders, and appreciate the non-static nature of the stakeholder landscape. As such, we update and improve our stakeholder mapping processes at the sites annually, in order to ensure all critical groups, including the vulnerable, are included in our engagement platforms.

The Kamoia-Kakula Copper Complex



2 traditional authorities

42 rural villages

200,000 inhabitants

dedicated community relations team

dedicated grievance officer

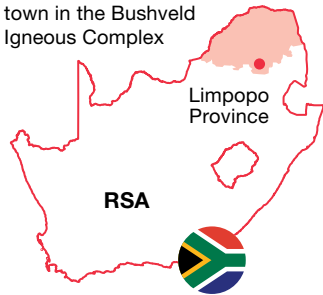
7,012 stakeholders engaged across 446 meetings



Stakeholder engagement with project affected persons in Kaponda near the Kamoia-Kakula Copper Complex.

The Platreef Project

Adjacent to Mokopane town in the Bushveld Igneous Complex



traditional authority and village headmen

20 semi-urban communities

over 150,000 individual residents

dedicated community relations team

2,076 stakeholders engaged across 127 meetings



Video link

Special Report

In November 2022, Platreef launched the internal rollout of a cross-platform communications system, **Hello Neighbour**, for employees and contractors with external launch to incorporate community members and all relevant external stakeholders planned for early in 2023. Hello Neighbour is powered by an independent third-party, enabling real time, transparent communication and feedback. The internal channel of Hello Neighbour allows for workers to voice their issues or concerns, either anonymously, or through identification, via the trustworthy two-way communication service, on a range of topics that include administrative issues and occupational related grievances to employee health and wellness, as well as human rights. Hello Neighbour's vision is being realized with the integration of the communication system by way of multiple platforms including WhatsApp, E-mail, SMS and Interactive Voice Response (IVR) providing the versatility needed for an inclusive implementation process across a wide range of stakeholders.

The Kipushi Project

surrounded by widespread rural communities

traditional authority

approximately 500,000 individual residents

dedicated community relations team

6,396 stakeholders engaged across 32 meetings



Local stakeholders performing cultural ceremonies to celebrate the relaunch of the Kipushi Project.

Key engagement topics across our stakeholder groups



Stakeholder engagement session held with project affected persons resettled in the Kaponda Community near Kamo-a-Kakula.

OUR WORKFORCE

Key topics

- Remuneration – salary scales, wage negotiations, bonuses (see page 46)
- Job grading (see page 46)
- Recognition for collective bargaining (see page 41)
- Working and living conditions and health and safety (see page 43 and 47)
- Training (see page 57)
- Scheduling of working hours (see page 39)
- Company development and progress (see page 15)



OUR SUPPLIERS

Key topics

- Vendor portal (see page 71 and 73)
- Supplier compliance, including contractor's packs (see page 67)
- Upcoming local procurement opportunities (see page 67)
- Human rights (see page 31)
- Registration on the supplier database (see page 67)



REGULATORY BODIES AND GOVERNMENTS

Key topics

- Mine progress (see page 15)
- Women in Mining (see page 43)
- Regulatory social plans – Cahier de Charge, Social and Labor Plan (see page 74)
- Land access and lease agreement (see page 85)
- Community development (see page 74)
- Employment (see page 42)
- Licences and permits (see page 90)
- Tax and royalties (see page 65)



OUR COMMUNITIES

Key topics

- Land access, surface lease agreement, resettlement and livelihood restoration (see page 85)
- Consultation and access to information (see page 30)
- Health: COVID-19, HIV/AIDS, malaria (see page 52)
- Community development (see page 74)
- Environmental awareness: arbor day, climate change, recycling (see pages 74, 106 and 107)
- Grievances (see page 30)
- Water and sanitation (see page 95 and 96)
- Employment (see page 42)
- Education (see page 59 and 81)
- Cultural and spiritual needs (see page 31 and 106)



OUR INVESTORS AND JOINT VENTURE PARTNERS

Key topics

- ESG approach, performance and reporting (see page 7)
- Safety (see page 52)
- Energy and climate change (see page 98)
- Water risk (see page 92)
- Tax (see page 65)
- Labor relations (see page 41)
- Diversity policy and targets (see page 42)



NON-GOVERNMENTAL ORGANIZATIONS

Key topics

- Women in Mining (see page 43)
- Artisanal and small-scale mining (see page 18, 23 and 53)
- Human rights (see page 31)
- Environmental awareness: Arbor Day (see page 91 and 106)
- Health: COVID-19, HIV/AIDS, malaria (see page 49)



Tracking community feedback, issues and grievances

We are committed to timeously and amicably resolving grievances. We regard a grievance as a notification, concern or complaint raised by an individual or group affected by our projects' activities averring that they have suffered some form of offence, detriment, impairment or loss as a result of our business activities and/or employee or contractor behavior.

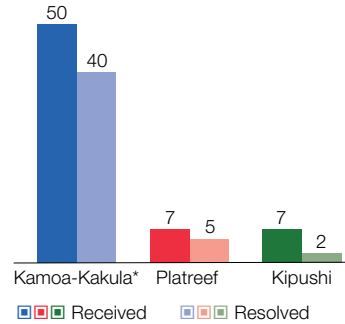
We have devoted and will continue to devote appropriate time and resources to share project information, obtain stakeholder feedback, address concerns, defuse misinformation and resolve issues, however, we acknowledge that we are human and don't always get it right. As such, we need adequate mechanisms that provide access to remedy, and a means to raise concerns or grievances with the organization outside of the normal engagement channels.

In order to cater to all our stakeholders, we have established an array of channels for engagement and/or feedback, including in-person, at public or community liaison meetings, via community portals, via phone, SMS or e-mail, or through our website and anonymous whistleblower hotline. Functional, accessible, multi-lingual and widely-published external grievance mechanisms are in place at our projects. In 2022, we launched a stakeholder engagement and grievance management platform at our Platreef Project.

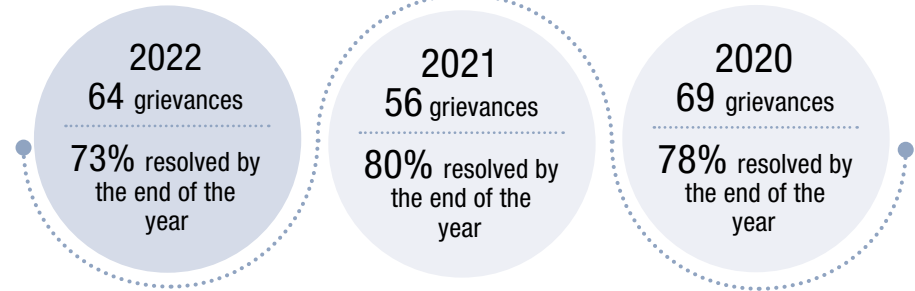
This pilot project will guide the subsequent implementation across all our operations. Grievances are managed by the community relations teams at the respective projects, and recorded and tracked through a web-based stakeholder management system.

We acknowledge that both concerns and complaints can result from either real or perceived impacts of our business, and we treat all grievances with respect and consideration. Our mechanisms are widely communicated through local platforms and accepted techniques and the process for grievance resolution entails several steps that need to be completed in a timely manner. Although we strive to handle all grievances internally, our process allows for escalation and we accept the right of the complainant to access judicial remedies.

Grievances received and resolved by location, 2022

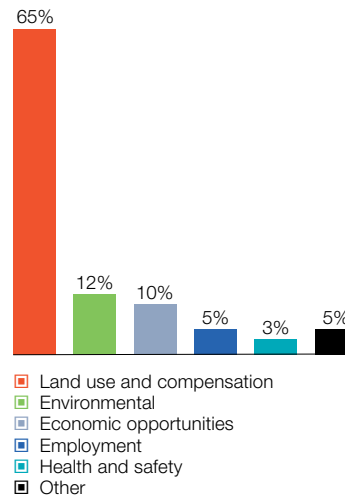


* The number of grievances recorded at Kamoia-Kakula are commensurate with the scale of the project and the number of project activities being undertaken.

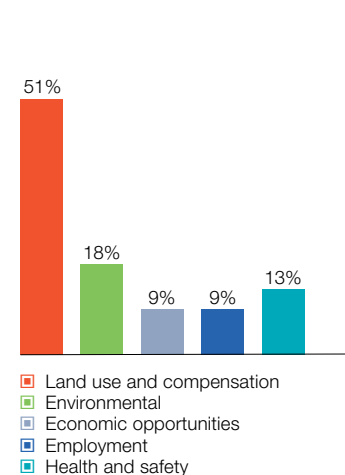


We remain committed to continually improving our social acceptability performance, ensuring that we analyze the trends and root causes of the issues raised, and implement action plans to address these root causes. We also analyze year-on-year trends of issues to ensure that we adequately focus our efforts, implement additional mitigation measures to prevent the ongoing recurrence of issues, where required, and monitor the effectiveness of these efforts.

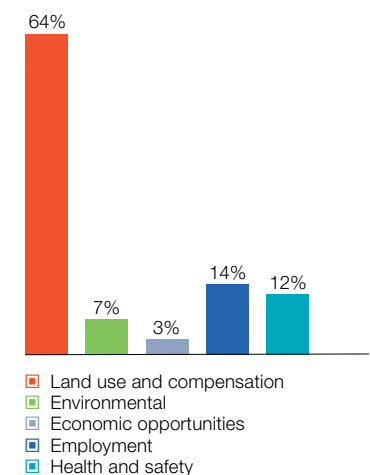
2022 Complaints received by category



2021 Complaints received by category



2020 Complaints received by category



The human rights lens

Our commitment to and respect for human rights is the foundation of Ivanhoe Mines' corporate culture, which underpins everything that we do.

Respect for human rights wherever we do business, and recognition of the equality and dignity of the people with whom we interact every day, is a fundamental operating principle embedded in our Statement of Values and Responsibilities and our Human Rights Position Statement. We acknowledge that these fundamental rights, which are inherent to all individuals – regardless of nationality, place of residence, sex or sexual orientation, national or ethnic origin, colour, religion, language, economic status, political affiliation, or any other status – provide the foundation for humanity to lead a dignified life, to freely express independent thoughts and to live free from abuse.

We believe that respect and support for human rights are imperative for the preservation of healthy, thriving, resilient communities, as well as for the ongoing acceptability of the organization in the form of a social licence to operate. We use our experiences and the guidance from our engagement with stakeholders to continually progress our approach to respecting human rights.

Our approach to respecting human rights is informed by the broad corpus of international human rights laws, declarations, covenants, principles, standards, and guidelines, as well as by the legislative prescripts in the countries where we operate. Our approach to human rights applies at every level of the organization to all employees, independent service providers, clients and visitors, as well as external stakeholders affected by our operating environment. Every organization has a responsibility to maintain a working environment that reflects respect for human rights, and that is free from all discrimination and harassment, as well as to respect and protect the communities and environment in which they live and work.



Ivanhoe respects all fundamental human rights, such as the right to practise one's religion. The Kaponda Church was opened to the community during the handover ceremony in 2022.

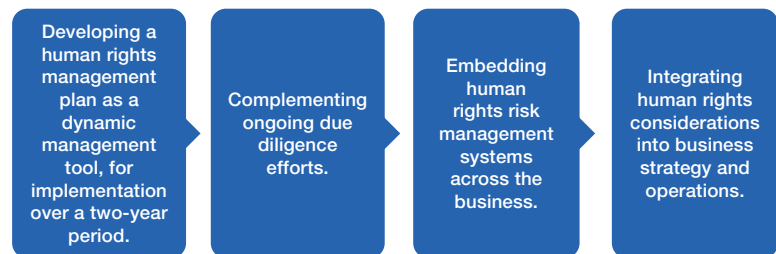
The United Nations Guiding Principles on Business and Human Rights (UNGPs) reaffirm countries as the primary duty-bearers under international law to protect against human rights abuses within their territories and jurisdictions by third parties, including business enterprises.

The UNGPs also provide that the responsibility to respect human rights is a global standard of expected conduct for all business enterprises wherever they operate. It exists independently of countries' abilities and/or willingness to fulfil their own human rights obligations, and does not diminish those obligations. It exists over and above compliance with national laws and regulations protecting human rights. Organizations thus have a responsibility to respect and avoid infringing on the human rights of others and to address adverse human rights impacts with which they are involved through making policy commitments to prevent, mitigate and remedy negative human rights impacts, conducting human rights due diligence, and providing access to remedy for any adverse human rights impacts they cause or to which they contribute.

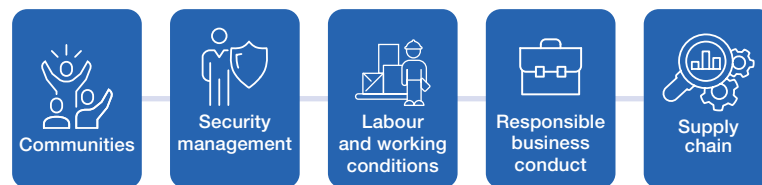
We acknowledge that effective management of human rights entails embedding human rights management into strategy and operations across the organization, providing multi-disciplinary accountability for proactive and effective human rights management. We are committed to the ongoing assessment of potential human rights risks associated with our activities, as well as across our broader value chain. We appreciate that human rights due diligence is an ongoing process of continuous improvement – identifying, prioritizing, assessing, acting upon, monitoring and reporting on human rights impacts – using building blocks such as human rights impact assessments that inform the development of strategic human rights management plans.

In 2021, Ivanhoe appointed Synergy Global Consulting (Synergy) to undertake a human rights impact assessment (HRIA) to identify and assess potential human rights impacts that Kamo-Kakula's activities may cause, contribute to, or be linked to, as well as to consider the project's relationships to these impacts and its capacity for leverage.

The intent of the 2021 HRIA was to progressively support Kamo-Kakula in managing human rights risks by:



A prioritization of salient human rights risks and impacts was undertaken, resulting in the following risk areas:



Ivanhoe commissioned Synergy to undertake further work in July 2022, on the HRIA for purposes of conducting an in-depth analysis and assessment and to provide recommendations in respect of some salient risks and issues identified in the initial HRIA that could not be fully assessed – specifically regarding security management, gender, contractors' living wage – as well as to monitor and integrate recommendations relating to procurement aspects and corruption risks from the 2021 HRIA into Kamo-Kakula's management systems.

In 2022, we trained security personnel and service providers across our operations on the Voluntary Principles on Security and Human Rights. We have also developed a human rights video and comprehension assessment, in both French and English, for broad-based stakeholder training across all our operations, which is planned for the first half of 2023.



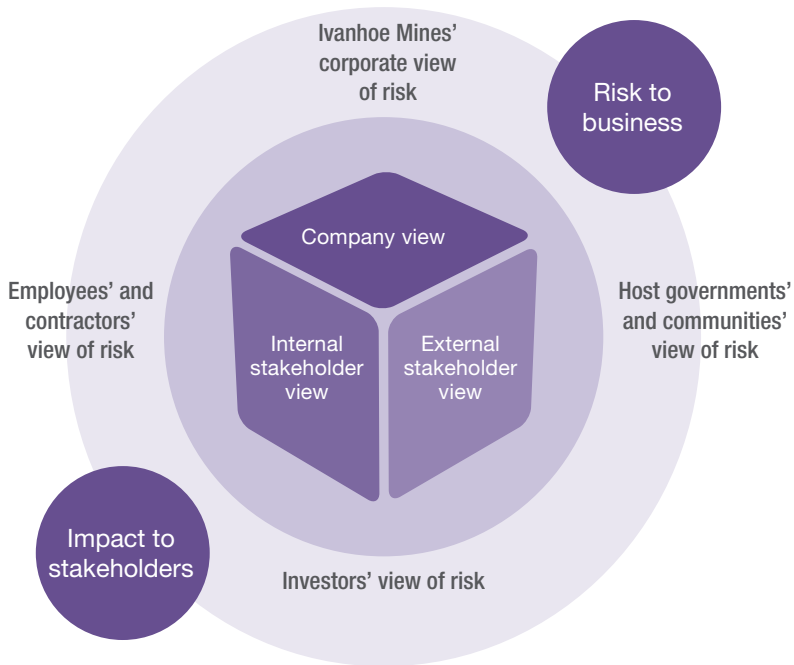
Members of Kamo-Kakula's Speed Prevention team, comprised of both Kamo-Kakula personnel, as well as personnel from the external security service provider, GBC, conducting traffic speed monitoring. Kamo's security personnel have all been provided human rights training.

In 2022, we revised our responsible sourcing policy and related standard operating procedure, as well as our supplier code of conduct, and we began developing implementation and supplier due diligence toolkits for implementation across all projects. As this suite of documents was not yet finalized by the end of 2022, we aim for complete roll-out in the first half of 2023.

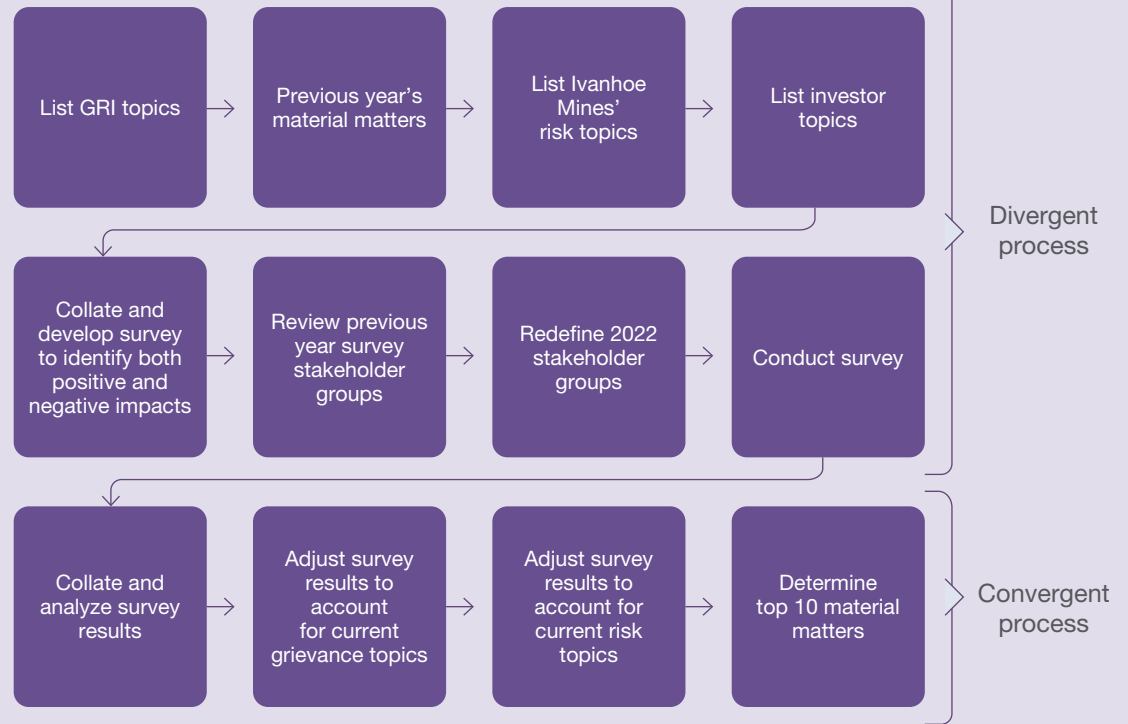
Materiality assessment

Ivanhoe Mines undertook a renewed materiality assessment during 2022, in order to determine how the Company is performing against global industry best practice for various sustainability topics, in the view of: (i) internal stakeholders (such as employees and contractors); (ii) external stakeholders (such as host governments and communities); (iii) investors; and (iv) Ivanhoe Mines itself. This will allow us to identify key impacts to stakeholders and key risks to the business.

Factors considered in determining materiality at Ivanhoe Mines



The materiality assessment was informed by the following approach and steps:



Methodology

A short survey comprised of 27 questions across the four categories – Governance, People, Prosperity and Planet – was disseminated to stakeholders. Stakeholders were asked to rate their agreement with statements of good practice in sustainability management as they relate to Ivanhoe Mines. All neutral answers were discarded to allow an overview of either positive or negative perceptions of impact.

The results were analyzed to determine which topics stakeholders felt Ivanhoe Mines' performance could be most improved on, as well as which topics Ivanhoe Mines performed well on.



Elias Kekana, Mine Helper, Platreef Project.

Participation

The survey was made available in French and English to a targeted population sample across various stakeholder groups and locations. A total of 117 respondents participated, broken down as follows:

Summary of participation per location



● Kamoia-Kakula	29
● Platreef	32
● Kipushi	44
● Corporate Office	11
● Other	1

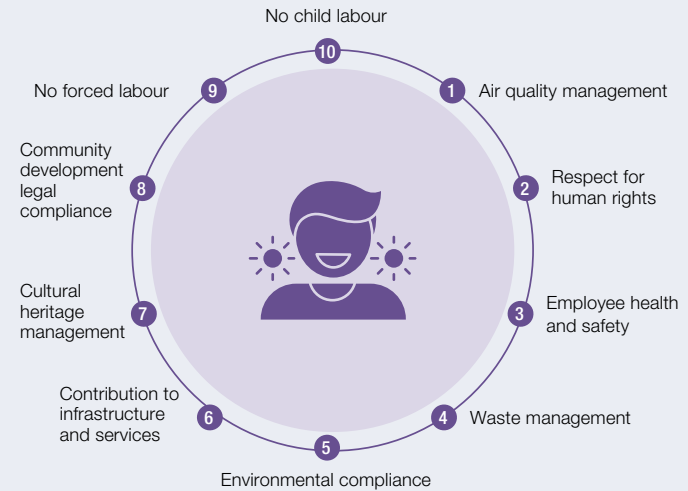
	● Male	● Female
External: Community Member	7	13
External: Local Government	2	1
External: Local Supplier	6	9
External: Long term contract worker	4	1
External: Stakeholder affected by land access, displacement and resettlement	3	1
External: Stakeholder that forms part of a vulnerable group	4	2
External: Traditional Leader	4	0
Internal: Employee band A to C	19	9
Internal: Employee band D to F	23	9
Total	72	45

The results were also compared to the corporate risk registers, the results of an investor survey and an analysis of the most frequent grievances received from community stakeholders at our operations.

Results

On average, stakeholder perceptions indicated that Ivanhoe Mines performs well on creating prosperity and sharing value, but that there are areas for improvement in relation to the management of people and the environment.

Positive perceptions of Ivanhoe Mines' conformance with good practice were highlighted in the following material matters:



Negative perceptions of Ivanhoe Mines' conformance with good practice were highlighted in the following material matters:





**Management of
Ivanhoe Mines’
Top 10
most material
impacts**

These identified material impacts inform our approach to sustainability disclosures for 2022. They also help us refine our sustainability strategy and better focus our efforts towards achieving and contributing to the UN SDGs, which we prioritize to create maximum positive impact.



Benjamin Sekano, General Manager, and Teon Swanepoel, Managing Director, at Ivanhoe’s Platreef Project.

1 Land Acquisition, Displacement and Resettlement (LADAR)
Striving to uphold best practice principles for resettlement and economic displacement.

2 Training and development of employees
Investment in training and development opportunities for our employees.

3 Biodiversity loss management
Ultimately striving for a net positive gain.

4 Water, sanitation and hygiene
Promoting responsible water stewardship that we can be proud of and managing the resource together with our stakeholders.

5 Local procurement, including vulnerable people
Promoting economic value for host countries and communities through local procurement opportunities and strengthening local businesses within our value chain.

6 Equal opportunity and employment
Striving to be an employer of choice.

7 Stakeholder engagement and grievance management
Maintaining effective stakeholder engagement plans and grievance mechanisms at all sites.

8 Climate change management
Ultimately striving toward net-zero carbon emissions.

9 Health and safety
Prioritizing the health and safety of our workforce and communities and continuing to improve our practices.

10 Socio-economic development opportunities, including vulnerable people
Regarding investment in our host communities as critical to our social licence to operate and valuing the contribution we can make to the prosperity of communities.

See p59, p67, p71 and p74 of this report for more information



Ivanhoe Mines and the United Nations Sustainable Development Goals

Expectations are growing for business to be part of the solution to society’s challenges. This is why it is important, now more than ever, for organizations to contribute to the achievement of the Sustainable Development Goals (SDGs) – we are in the decade of action on the UN’s 2030 Agenda for Sustainable Development.

Ivanhoe Mines has come a long way in recent years in terms of integrating the SDGs into our sustainability journey and striving to embed an effective response to our prioritized SDGs and targets. We have set a clear sustainability strategy with key priorities. By setting visions for prioritized SDGs and focusing on the most actionable in our operational environments, we are working hard towards embedding the SDGs into our business strategy and processes.

In 2020, we set out to identify our priority SDGs, and have revisited these annually to ensure they remain prevalent. The most important SDGs for Ivanhoe and our stakeholders are: SDG 1, SDG 3, SDG 4, SDG 5, SDG 6, SDG 12, SDG 13 and SDG 15.

In 2022, Ivanhoe Mines commissioned PwC to complete a “current state analysis” of our contribution to our prioritized SDGs. This assessment considered the average contribution across 31 targets identified by Ivanhoe Mines, on a scale of aspirational to integrated, at each of our projects. The outcomes have been used to identify strengths and gaps, as well as specific opportunities to maximize our contribution to the SDGs. These findings will also guide a granular and practical Implementation Plan that PwC will help develop with us next, to enable Ivanhoe Mines to become more resilient in its pursuit for sustainable development.

In summary, PwC found that Ivanhoe Mines has undertaken a number of bold and transformative steps to help shift the communities in which we operate onto a sustainable and resilient path. Through group-wide and project-specific activities to address economic, health and safety, environmental and social issues, the Company has started contributing to the SDGs. While more specific suggestions are provided for each SDG (at a project level) in the PwC report, a number of overarching considerations were noted in order to meet the call to action through strategy and funding, collaboration, capabilities, service delivery and impact, and leadership and trust.

In conducting these assessments, PwC identified an opportunity to share learnings between our projects in an effort to collaborate and ‘shift the dial’. From a capabilities perspective, PwC further noted that core skills and baseline data will play a crucial role in this effort, particularly in 2023 (before production across our projects ramps up in 2024).

PwC also noted that the communities in which we operate have provided input to the Social and Labour Plan for the Platreef Project and the Cahier de Charges for the Kamo-a-Kakula Copper Complex and the Kipushi Project, respectively. Their inputs have culminated in ongoing, new and potential projects that support our service delivery and positively impact Ivanhoe Mines’ value creation, beyond the protection of our social licence to operate. In turn, Ivanhoe Mines has demonstrated responsible leadership and continues to build trust which is key to building resilience.



Ivanhoe is committed to continuing on its SDG journey with the aim of building resilience – the ability to maintain progress on the SDGs – in the pursuit of long-term, shared value creation.



Winners of the SDG awareness poster-making competition from local primary schools near the Platreef Project.



Eight primary schools from communities surrounding the Platreef Project participated in an awareness campaign, aiming to educate youth about the United Nations SDGs. Learners from these schools participated in an SDG poster-making competition by creating posters about the SDGs, as well as on Ivanhoe's eight priority SDG goals. The top ten students who produced the best posters from each school, as well as three teachers per school, were invited to attend an awareness day held at the Mokopane Conservation Centre. A judging panel, comprised of the Ivanhoe team and local authorities selected the top eleven posters, awarding educational Bubblegum tablets to the children who designed the most creative, well-crafted posters.



4

OUR PEOPLE

As we advance our project development and mining operations, new chapters in our story are ignited by periods of continuous change, accelerated growth, and significant opportunity. Throughout this progression, what is imperative to us is that we maintain our corporate culture and values and continue to ensure that each person is treated with respect, dignity and appreciation. We therefore maintain our commitment and dedication to excellence, innovation and compassion in our drive to progress the development of strategic and valuable human resources.

Kamoa-Kakula is committed to local employment, with 97.4% local employees.

Our commitment and approach to our people



Alignment with Ivanhoe's Priority SDGs

Health and safety

Acknowledging the inherent dangers of mining, we are committed to securing and maintaining a safe and healthy work environment that is injury- and fatality free. We also strive to employ principles, standards and initiatives that reflect our commitment to ensuring community health and safety and we seek to maintain a high degree of emergency preparedness to effectively prevent or respond to emergencies.

Valued workforce

Recognizing that a well trained, diverse, engaged and financially secure workforce is a key driver of an organization's ultimate success and resilience, we strive to be an employer of choice, where people are proud to work. We seek to create an inclusive, fulfilling, safe and high-performing work environment where our people feel valued and attain professional fulfilment, enabling them to be ambassadors for the Company's vision, mission and values.

Equal opportunity

Recognizing the core conventions of the International Labour Organization (ILO), the UN's 2030 Agenda for Sustainable Development, as well as the WEF's SCM People pillar, our approach to people is underpinned by the principles of equality and dignity. We seek to enable and ensure decent work and economic growth, and encourage diversity of gender, background, religion, culture, disability and age, among many other things. We endeavour to be an equal opportunity employer, by employing and promoting employees based on merit, and we do not tolerate any form of discriminatory conduct, or harassment in the workplace. We are continually striving to foster a culture founded on mutual respect, fairness, integrity and compassion.

Human Rights

Respecting human rights and the recognition of the equality and dignity of the people with whom we interact every day is a fundamental operating principle embedded in our Statement of Values and Responsibilities and our Human Rights Position Statement which underpins everything that we do. We believe that respect and support for human rights are imperative for the preservation of healthy, thriving, resilient communities, as well as for the ongoing acceptability of the organization in the form of a social licence to operate. We use our experiences and the guidance from our engagement with stakeholders to continually progress our approach to respecting human rights.

Fair labour practices

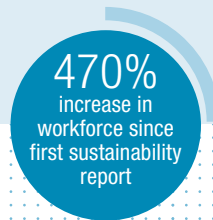
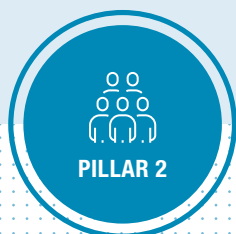
Acknowledging that workplaces have the potential to adversely impact numerous human rights, we fundamentally respect and promote the right to work for fair wages, as well as the right of our workers to bargain collectively or to join trade unions and representative organizations. We prioritize inclusive engagement with our workforce and provide open communication and grievance channels, including an anonymous whistleblower line. We further strive to enhance the economic and holistic well-being of our employees by providing the opportunity to pursue a career for both a purpose and for financial security, by providing fair and competitive compensation and benefits, as well as decent working hours and adequate breaks and leave.

Local development

Ensuring that the vast majority of employment opportunities at our projects are made available to local people from our host communities, or nationals of our host countries, is a key agenda for Ivanhoe Mines. We further endeavour to prioritize women and the vulnerable or marginalized in these communities, such as people living with disabilities, by affording these groups with opportunities for training and development.

Skills development

Acknowledging the pivotal role that the mining industry plays in social and economic development by providing well-paying jobs and promoting the development of a more skilled local workforce, we seek to invest in technological research and the development and training of skills for the future, as well as to provide access to a range of training and development opportunities.



Our workforce



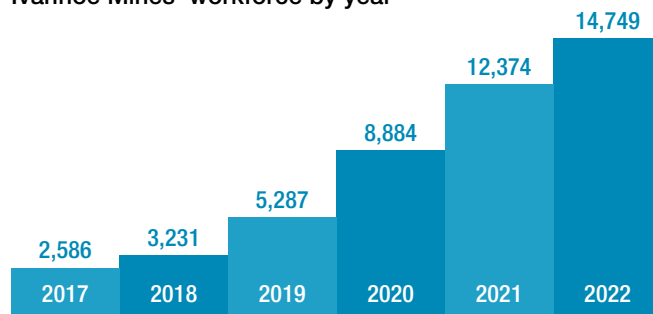
Our workforce (comprising of both employees and contractors) as at December 31, 2022

= 14,749 ↑ 19%

New hires



Ivanhoe Mines' workforce by year

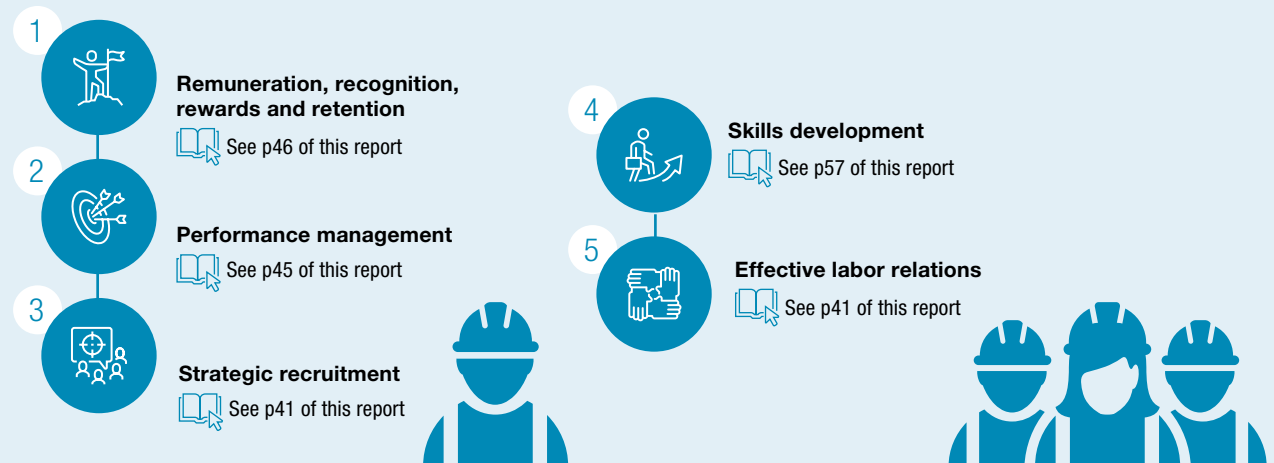


At Ivanhoe Mines, our commitment to employee job satisfaction is driven by targeted and effective human capital management. Skills development, education and training, and value-driven capacity building all influence earning and performance potential. We aim to provide an inclusive, fulfilling, safe and high-performing work environment that promotes engagement, equal opportunities, fair remuneration, accountability and responsibility.



Jordan Kazadi Muyombo, HPGR Operator, Martin Kumwimba Kanyonga, Safety Trainee, Léa Tshikut Kabwiz, Milling Attendant Operator, Ben Kasongo Mutombo, Instrumentation Artisan, and Robert Kapumba Kap'ka: HSE Specialist at the Kamoa-Kakula Copper Complex.

Ivanhoe's strategic human capital management

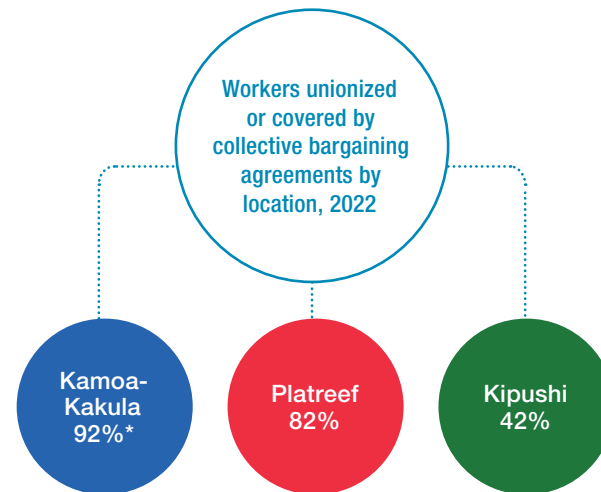


Our labor relations

We are committed to upholding constructive relationships with employees and their unions, respecting our employees' workplace rights, including the right to freedom of association and collective bargaining. We are committed to ensuring that employees across all our operations are familiarized with their workplace rights and that trade unions are afforded the rights and engagements associated with their representation of the workforce (as governed by law and as agreed under the Collective Bargaining Agreements concluded at each site), thereby ensuring:



In 2022, 82% of our employees were unionized or covered by collective bargaining agreements.



Kamoakakula's multi-party collective bargaining agreement is comprised of five representative trade unions who conduct quarterly engagements. Kamoakakula's human capital teams also hold monthly roadshows to ensure accessibility to human capital representatives to foster free-flowing communication.

* The significant increase in Kamoakakula's unionized workforce is attributable to the fact that all Patterson Band A to C employees are covered by the Collective Bargaining Agreement.

In October 2022, the Security Officers Workers Union of South Africa (SOWUSA) met the threshold for sufficient representation at the Platreef Project, through 97 membership stop orders, representing 33% of the workforce, thereby requiring Platreef to enter into organizational rights discussions with SOWUSA. Platreef's Worker's Forum still represents the majority of Platreef's Patterson A-, B- and C-band employees. During 2022, the Worker's Forum revised their constitution and were assisted with capacity building and resources.

Following extensive labour planning undertaken in August 2022, negotiations for the collective bargaining agreement for the Kipushi Project continued. Good progress was made towards finalizing the Company Rules and a draft agreement was prepared for final negotiation and execution early in 2023.

In 2022, one strike occurred at Kamoakakula in respect of an increase in underground bonuses for Kansoko Mine employees, whereafter a new allowance was implemented. No strikes were recorded at neither the Platreef Project nor the Kipushi Project.



Jean-Claude Wandalika, Human Resources Director, engaging with labour organizations regarding the Collective Bargaining Agreement at Ivanhoe's Kipushi Project.

Our recruitment

Attracting the most suitably qualified candidates requires a transparent and fair recruitment process that reflects the organization's business objectives, strategy and culture. Ivanhoe embraces equality and diversity and our inclusive workforce is indicative of our effective recruitment policy.



Video link

Special Report

Having greater representation of ranging perspectives enables us to better innovate and transcend the boundaries of mining as we know it. We asked members of our workforce across our projects what Ivanhoe Mines means to them and this is what they had to say...

Diversity, inclusion and local employment



Ivanhoe believes that a diverse and inclusive environment establishes a foundation for greater innovation and representation in the workplace. We make every effort to support our people to develop, grow and excel as individuals.

We strive to ensure that all persons have equal opportunities for recruitment or promotion, regardless of their race, skin colour, national origin, gender, disability, religion, sexual orientation or age. We also strive to promote an inclusive workplace that ensures adequate representation of typically under-represented groups.

We are cognizant of the value of diversity in driving organizational performance. Diversity, creativity and innovation is fostered by encouraging a multitude of perspectives and opinions. This, in turn, promotes effective decision-making and identification of solutions. We are extremely proud of our growing diversity representation at our projects.

We also recognize that diversity at the Board level is critical to ensuring that the governing body of the Company possesses the attributes, experience and skills to effectively oversee the strategic direction and management of the Company. Our Diversity Policy requires that diversity, female representation, diverse backgrounds and relative skillsets are considered, alongside meeting the mandates and any regulatory requirements of the Company, when nominating or identifying director candidates.

Ivanhoe Mines is continually refining its reporting approach, as we believe regular updating and transparency fosters accountability in creating greater diversity and inclusion in the workplace. At Ivanhoe Mines, we track indicators such as gender, age, local employment and local employees in management (addressed below and on page 44) to prioritize our efforts in promoting diversity and inclusion.



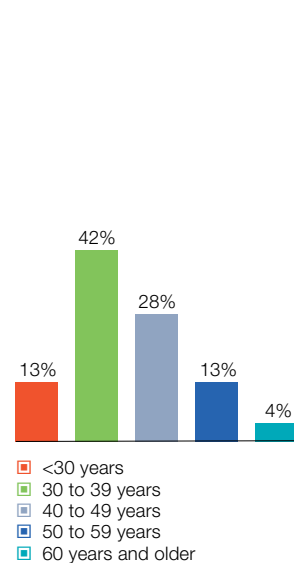
[Video link](#)

Special Report

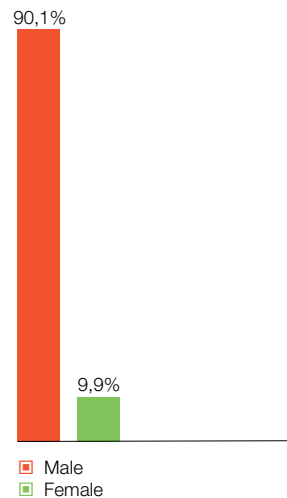
**Dr Poobie Pillay,
ESD Manager and Head of
Transformation, Platreef Project**

Poobie's passion for training, lecturing and working with suppliers in rural areas fueled his desire to overcome his disability. Despite having Rheumatoid Arthritis, Poobie now champions enterprise and supplier development at Platreef, and his role has recently been expanded to include the wider ambit of transformation. Poobie shares his story – a story of suffering, drive and ultimate triumph.

Employees by age group



Employees by gender



Local employees



[Video link](#)

Special Report

Coco Musas

Coco Musas, a Kamoia-Kakula employee for the past decade, lost his hearing shortly after birth. He was employed by Kamoia in 2013 after the need for building beehives and repairing damaged furniture arose at Kamoia-Kakula. Today, Coco heads the carpentry workshop at the Kamoia Camp. Coco's story is encouraging and uplifting. His contribution to the development of people from the local community is something he prides himself on and despite the limitation he has, he has used it as an opportunity to inspire.

Gender inclusion

Women are typically under-represented across all levels in the mining sector. We are committed to playing an active role in increasing female representation in the workplace. We continuously strive to adapt and diversify, particularly in seeking to eliminate the systemic barriers to the advancement of women in the DRC. We believe in equality, promoting equal work for equal pay, and value the different perspectives that female representation brings to the organization.

Our Board has committed to a Board composition in which women represent at least 30% of all directors by 1 July 2025 and thereafter to maintain and improve this percentage. Furthermore, we are committed to maintaining no less than 20% of executive management positions held by women. In 2021, Ivanhoe Mines adopted group-wide aspirational targets of between 20-30% female representation across different Patterson grades by 2030, also striving to attain at least 15% inclusion across all levels by 2025.

One of the key barriers faced by women in the mining industry is a lack of access to training and development opportunities. Many women are unable to take advantage of the training programs due to various reasons, which becomes a hindrance to their career growth and advancement. To address this issue, Platreef offers training and development programs specifically for women, which are designed to help them build the skills and knowledge they need to succeed in the industry. We are also continuously considering females in our executive succession and appointment planning.

For the 2022 period, key gender representative employee data includes:

	Male	Female	Total	
Board of Directors	9	2	11	18%
Kamoa-Kakula	2,838	185	3,023	6.1%
Platreef	224	82	306	26.8%
Kipushi	462	56	518	10.8%
Group Services	90	75	165	45.5%

Additional initiatives have also been incorporated to progress gender inclusion. One such initiative is a Women in Mining (WiM) program which strives to ensure that women are adequately represented in technical positions, as well as aims to address issues affecting women in the mining environment. These committees provide a platform for female employees to raise concerns with management in a structured manner – such as addressing on-site living conditions for women and raising awareness on sexism, violence, discrimination, health and safety in the workplace – and also to participate in recruitment and development opportunities for women. In 2022, the female representation at Kamoa increased from 5% to 6%, a significant achievement given the size of Kamoa-Kakula’s workforce.

Platreef’s Women in Mining theme for 2022, “Empowerment and Sisterhood”, sought to emphasize the support and encouragement provided by women workers in the mining industry to each other. This includes sharing of experiences and skills, creating a supportive network, and advocating for equal treatment and opportunities for women in the workplace, as well as an annual event wherein mentors and motivational speakers are brought to empower and encourage women to prioritize their personal development and aim for the stars.

At the Kipushi Project, gender inclusion initiatives were advanced through awareness sessions hosted in the communities on gender equality and equity, cancer awareness and Women’s Day celebrations.



[Video link](#)

Special Report

Ivanhoe Mines’ President, Marna Cloete, recognized as WiM 100 Global inspirational women in mining

Marna Cloete believes she was destined for a career in mining and cannot imagine what would have happened if she had ventured into a different industry. Aside from the fact that she thoroughly enjoys the technical aspects and is a firm believer in the fundamentals that underpin the industry, she finds something special about the kindred league of miners – the dusty overalls, hard hats and headlamps all frame the faces of hard-working men and women who share the same grit and passion. Marna strives to mentor and support others and to be a catalyst for the creation of opportunities and a platform where they can excel.

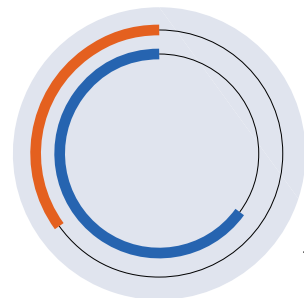
MATERIAL TOPIC

Local employment

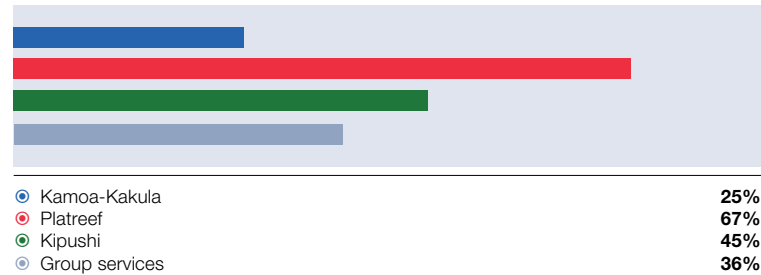
Ivanhoe Mines also fosters diversity through recruiting and retaining local talent from our host communities. We prioritize and strive to maximize local employment by implementing recruitment policies and procedures that advertise positions internally and locally first, before approaching external candidates and only if a suitable local candidate cannot be found. All opportunities for casual labour, or which do not require specific skills, are filled locally. We have also cascaded these principles down into our supply chain and require all our contractors to comply with these recruitment policies and procedures.

Capacity building is key. We have developed extensive training programs that are designed to prepare candidates from the local communities for work at our respective operations. In accordance with our skills transfer and development program, and South African regulatory requirements, an increasing number of management positions (Paterson D band and above) are also being filled by local employees. We are actively working on evolving our human resource development programs and our internal systems, structures and approaches to enhance diversity and inclusion in our workforce.

Local employees in management



Local employees in management by site



At our Kamo-a-Kakula and Kipushi Projects, we have implemented a skills transfer program between expatriates and Congolese nationals to progressively increase the number of Congolese nationals in the Company's management. Moreover, in 2022, major strides were made in implementing active management development programs.



Video link

Special Report

**Evelyn Kasongo,
Senior Procurement Coordinator, Kipushi Project**

Evelyn Kasongo's story is a testament to her drive and work ethic. Evelyn has always dreamt of contributing to the development of her home community and she aspires to further increase her knowledge and skillset so that she can play an instrumental role in the advancement of the Kipushi Project and the surrounding communities.

Our performance management

Ivanhoe Mines believes that ongoing and regular performance feedback is key to enhancing efficiency and communication. Authentic, well executed performance management advances both the organizational mandate, as well as employees' success, strength, talent, performance, productivity and growth potential. Performance of our entire executive management team is measured by way of a corporate scorecard based on Ivanhoe Mines' annual corporate strategy, including ESG indicators. Ivanhoe's projects are also assessed in terms of individualized project scorecards, wherein ESG objectives are also included. Dedicated performance reviews are conducted on an annual basis, for designated employees.



Ivanhoe Mines' performance management systems

Clearly defined job description providing a clear understanding of required work output plus key performance indicators (KPIs) which inform employees' objectives and scorecards

Performance reviews to appraise ongoing work performance (conducted twice annually)

Beneficial two-way process providing information sharing and accountability, keeping employees on track, fostering benefits and promotions and guiding employee development through individual development plans (IDPs)



[Video link](#)

Special Report

Paulin Mulaj, Managerial Leader, Engineering, Kamo-a-Kakula

Our very own Lubumbashi born Paulin Mulaj grew from a hopeful boy in a family of twelve, joining Ivanhoe Mines as an intern and growing to the role of Managerial Leader, Engineering at Kamo-a-Kakula Copper Complex. Today Paulin lives by the motto: "Always listen and keep learning" and he commends Ivanhoe on the continuous efforts made to develop employees who ultimately strive toward executive positions.



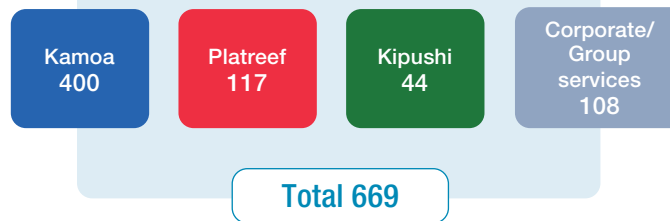
[Video link](#)

Special Report

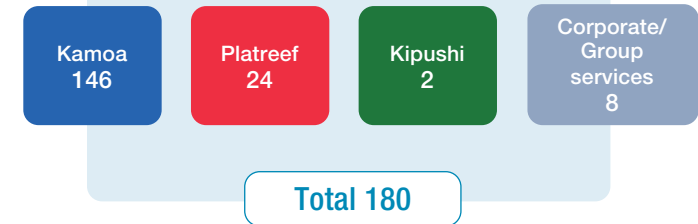
Thabang Nkhuna, Systems Development Officer, Platreef

Thabang Nkhuna, a proud native of Mokopane, South Africa, is a shining example of impressive professional growth due to hard work, determination, and continuous learning. Thabang's remarkable journey from a Community Relations Assistant to a Systems Development Officer during his decade-long tenure is also a testament to the Company's unwavering commitment to developing its employees and helping them reach their full potential.

Performance reviews conducted, 2022



Promotions, 2022





Promotion of employees at Kansoko Mine, Kamo-Kakula Copper Complex.



Employees recognized for their years of service at the Platreef Project.



Our remuneration, recognition, rewards and retention

Fair and equal pay enables employers to attract and retain employees, thereby improving motivation and productivity, as well as creating a more effective workforce. Fair and equal pay considers both (i) wage levels; as well as (ii) pay gaps. As a fair pay employer, Ivanhoe Mines provides the same pay and benefits for work that requires similar levels of effort, skills, knowledge and responsibility. Moreover, as an equal pay employer, Ivanhoe Mines provides the same pay and benefits for men and women doing similar work.

Dignity and equality in the workplace require that all employees feel valued and respected and receive fair treatment with appropriate compensation and benefits. This is further supported by the basic human right to work for fair wages. Ivanhoe Mines strives to pay a living wage which both meets employees' basic needs for a decent standard of living and also includes some discretionary income.

DRC law has set the local monthly minimum wage in the formal sector to 7,075 Congolese Francs (approximately \$3.50) per day or 172,630 Congolese Francs (approximately \$80.00) per month for a five-day week and the minimum living wage in the local town of Kolwezi, is around \$402 per month.¹ Kamo-Kakula pays wages approximately three times above the DRC minimum wage and includes additional benefits, such as the provision of medical care, payment

of school fees, and provision of maize meal to employees to ensure that their total package meets the requirements for a living wage.

In South African, the local minimum wage is \$223 per month.² The minimum living wage ranges from \$318 to \$550 per month for a single per person and from \$397 to \$727 for a family of four.³ Our South African based entry level remuneration is 4.2 times higher than the local minimum wage and 28% higher than the national average living wage for a family of four.

To ensure that our employees are well compensated for work performed and that their wages are favourably comparable to the current prevailing market, Ivanhoe periodically performs market-based benchmarking studies with internationally recognized companies. Ivanhoe uses the Paterson Job Grading System to

evaluate each job, thereby ensuring that equal pay for equal work is maintained, regardless of gender.

We are committed to not only attract top talent, but also to retain such talent in our workforce through, among others, fair and competitive remuneration. This includes other benefits for full-time employees, including medical cover contributions; life insurance and funeral cover; and paid annual, maternity and parental leave. Certain employees are also eligible for participation in share-based programs.

To aid our strategic agendas and to support our vision of being an employer of choice, we track permanent employee turnover to ensure that we understand workforce dynamics and changes. Employee turnover refers to an employee exiting employment through dismissals, resignations or company reorganization.

In 2021, we recorded a turnover rate of 2% and in 2022, this increased to 4.81%.

¹According to a November 2021 report based on a study conducted through extensive field research in and around Kolwezi by UK-based corporate watchdog Rights and Accountability in Development (RAID) and the Centre d'Aide Juridico-Judiciaire (CAJJ), a Congolese legal aid centre specialised in labour rights.

²Department of Employment and Labour, Government Notice. National Minimum Wage Act No. 9 of 2018.

³The minimum wage reported here is less than in our 2021 Sustainability Report owing to fluctuations in the US Dollar to South African Rand exchange rate, however the South African local minimum wage increased from R3,710 to R4,067.

³New 'living wage' for South African, New 'living wage' for South Africa (businessstech.co.za). (Accessed on March 30, 2023).

MATERIAL TOPIC

Our commitment to health, safety and well-being

Health, safety and the personal well-being of our employees are core to our business. We base our commitment to health and safety (H&S) on care for our employees, contractors, the communities in which we operate and the environment.



Lead

We are committed to providing a safe working environment by effectively managing workplace risk through **leadership** and resources for managing H&S to ensure that our people have the knowledge and ability to safely perform their duties.



Educate

We are committed to protecting our people so that everyone **returns home safely** at the end of each and every day, and **providing the resources and education** that supports the safe, reliable and responsible operation of our assets.



Inspire

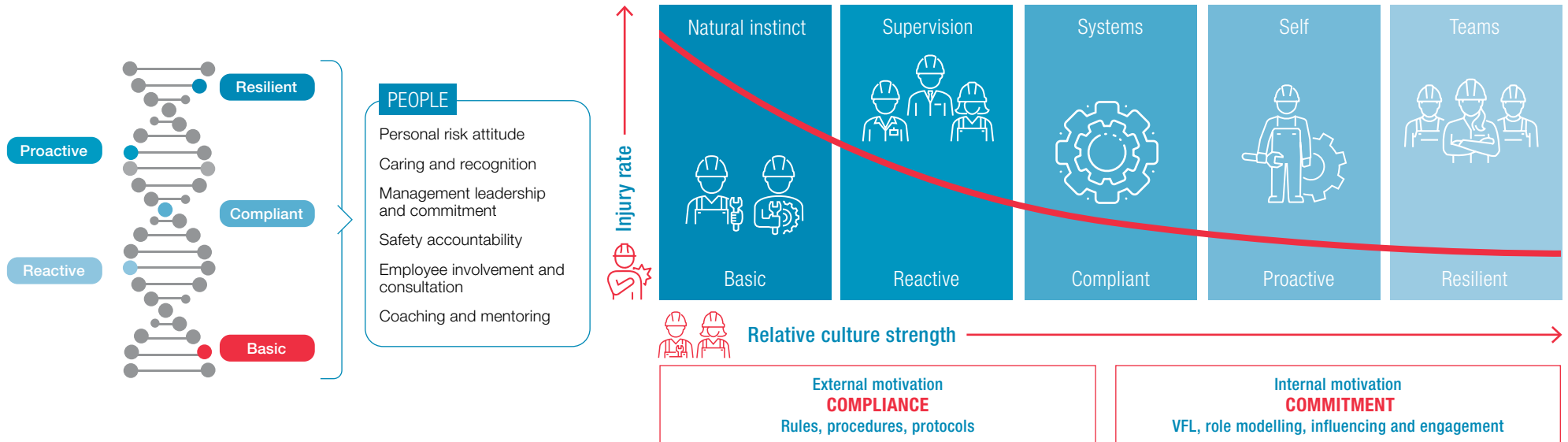
Our goal is to create **a culture of safety excellence**. We insist on a high level of commitment to H&S from our management and employees, and all of our contractors, as we continuously strive to achieve the goal of 'zero harm'.



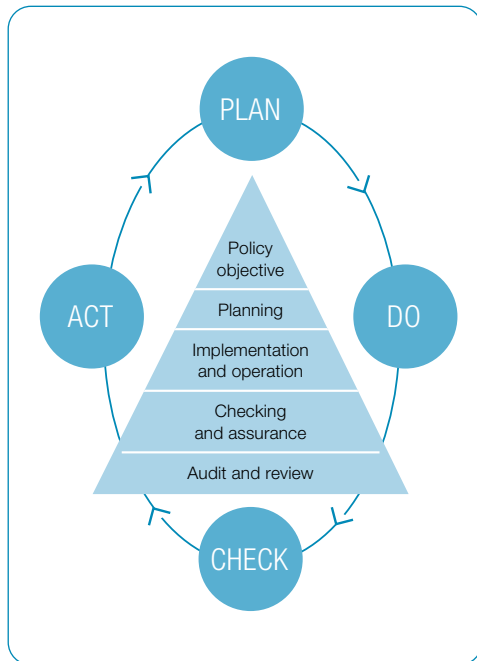
Demonstrate

We have instituted a group H&S policy and disclosure framework, as well as site-specific **policies, standard operating procedures and systems**, to ensure we are able to comply with our credo of **'Home without harm, everyone, every day'**.

We are committed to embedding a culture of safety resilience so that we can achieve our goal of zero harm through a workforce that is themselves committed to safety. To foster our culture of safety, we practice visible felt leadership (VFL). Our ethos is that we each carry personal responsibility to proactively manage our own safety, along with the safety of everyone around us. All workers have the right to withdraw from unsafe conditions or refuse to work in unsafe environments, and are encouraged to immediately report unsafe equipment, practices or workplaces on site.



In order to drive our strong safety culture and performance, our safety targets are included in our corporate scorecard and linked to executive remuneration. We are committed to securing and maintaining a safe and healthy work environment that is injury-free, with a specific focus on eliminating fatal accidents. It is crucial that all personnel can return home safely, every day. We are thus committed to ensuring that our worksites are designed and operated to promote and protect the health and safety of our workforce – by identifying, preventing, eliminating or mitigating the risks to health and safety – and to providing the appropriate framework and change management processes for our people, including establishing effective communications, systems and controls to achieve this.



Safety team at the Platreef Project.

Our commitment to health and safety is towards our own employees, as well as our contractors and communities. We care, and together we aspire towards a happy, healthy workforce, working toward continuous improvement and having every job, every day, completed safely. We also seek to maintain a high degree of emergency preparedness to effectively prevent or respond to emergencies.

Risk assessment

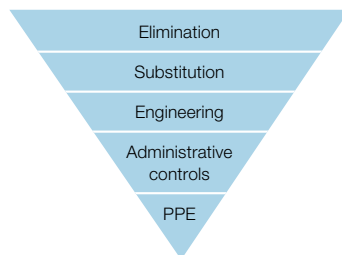
Mining is inherently associated with health, safety and well-being risks. Working in a complex mining environment poses the risk of accidents, injuries and occupational illnesses and diseases, such as noise-induced hearing loss and heat-, radiation-, chemical-, toxin-, metal-, and particulate exposure. These risks also pose potential legal, reputational and financial risks, as organizations may encounter costs associated with accident investigations, onsite mitigation measures, worker compensation payments, increased insurance premiums and litigation, as well as suffer losses related to factors such as a loss of revenue due to “down time”, a decline in market capitalization, or an inability to access finance.

Our approach to H&S risk management is designed to address the site-specific circumstances and requirements at our projects, as well as the needs of our workforce and vulnerable groups within our workforce, such as women and people living with disabilities. In order to mitigate workplace H&S risk and keep our people safe, we have implemented an integrated occupational health and safety (OHS) management system through which our H&S risks are actively managed.

We apply a layered risk management process comprising baseline-, issue-based-, routine-, non-routine and continuous risk assessments. The hierarchy of control for the elimination of hazards and reduction of H&S risks must be applied. We also maintain risk registers at each of our projects, which are reviewed on a quarterly basis by the group executive

team. We complete routine inspections and audits, and report and record all incidents, including near miss incidents. All related processes, risks and controls must be documented to demonstrate and measure implementation of controls and the effectiveness thereof. We evaluate and seek to enhance our performance based on leading and lagging indicators from these inspection and audit outcomes and incidents. Incidents are thoroughly investigated to ensure that root causes have been determined and appropriate mitigating or remedial actions are implemented. Hazard notifications are distributed after all incidents to raise awareness and prevent reoccurrence.

Hierarchy of control for the elimination of hazards and reduction of H&S risks:



At times, changes may also be necessitated on a non-routine basis, for example, when new equipment is obtained, or to comply with revised regulations or instructions following inspections by authorities.

Our health performance and initiatives

We place a high priority on our employees health and wellness. Through our integrated OHS management system, we systematically anticipate, identify, evaluate, control and monitor occupational health hazards and exposures. Continued exposure to occupational health risks may result in harmful health conditions, which could have a detrimental long-term effect. Therefore, we also provide occupational health services with the aim of protecting the health of our workers in relation to their work environment. Pursuant to this commitment, in 2022, 100% of our workforce was covered by OHS programs. Each of our projects has access to a fully equipped medical team, comprised of qualified and experienced doctors and nurses, as well as an emergency medical response team available during working hours for routine occupational health consultations and 24/7 for emergencies. In compliance with the relevant labour and mine health and safety regulations applicable to our projects, we also provide access to basic medical care to all our employees and, where applicable, to their dependants. The Kamoja-Kakula and Kipushi Projects have concluded service-level agreements (SLAs) with local hospitals, to ensure that employees and their direct family members always have access to healthcare professionals. Employees at the Platreef project and our corporate offices are provided with medical insurance.

Special Report

Kamoja hospital and Kakula trauma clinic

In 2022, the Kakula Clinic and Trauma Center was commissioned to serve employees and contractors from Kakula North and South. It has a staff complement of 12 and accommodates five beds for observation, one procedure room for minor trauma, a medical laboratory and pharmacy. All medical, emergency and trauma cases are consulted at the clinic and transported to the Kamoja hospital if needed.

The hospital at the Kamoja Camp is a world-class healthcare facility, which proudly showcases an emergency casualty ward and intensive care unit. The 15-bed hospital facility is ready to stabilize and comfortably care for patients. Development of the x-ray facility and trauma theatre unit are underway and expected to be ready in 2023. In its mission to go green, the hospital had adopted a paperless system that will enable doctors to digitally access information worldwide, as well as better secure confidential patient information. An on-site occupational health centre was constructed where pre-employment- and annual medical surveillance assessments will be undertaken.



As Kamoja-Kakula Copper Complex is located in a vastly affected malaria zone, it is a threat to employee health, with 2022 seeing a spike in cases and a number of employees being infected with new strains of malaria. As such, ongoing efforts are implemented to manage this risk with preventative measures, including indoor room spray, larvicide of stagnant water, fogging, mosquito nets and sensitization remaining a key focus throughout the year. Given the risk posed by malaria, reliable laboratory-diagnostic services are also necessary to ensure an early and appropriate treatment response. Specialized laboratory equipment at the Kamoja hospital provides accurate malaria and typhoid fever diagnostics for patients.

Ivanhoe Mines' Health Campaigns, 2022



Cancer Awareness Campaign held at Kamoa-Kakula in 2022.

KAMO-A-KAKULA

HIV counselling, a voluntary screening and awareness campaign, conducted over 22 days benefitting 5,873 participants

Malaria awareness and prevention campaign

PLATREEF

Monthly health topics and interventions

HIV awareness campaign

Mental health campaign

Tuberculosis-, diabetes-, breast cancer-, prostate cancer- alcohol abuse and lifestyle diseases awareness

KIPUSHI

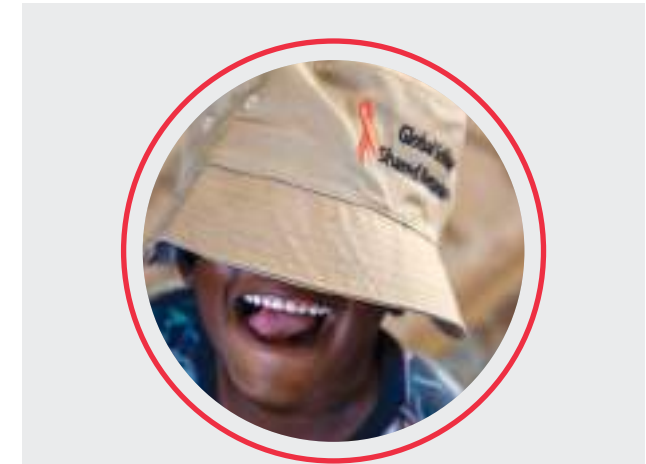
HIV awareness campaign

Malaria awareness and prevention campaign

COVID-19 vaccine booster campaign

CORPORATE

Wellness screening campaign (glucose, cholesterol and blood pressure tests; a postural assessment; an eye assessment; weight, height and body mass index (BMI); and voluntary, confidential HIV tests)



[Video link](#)

Special Report

Uniting in the global fight against HIV/AIDS

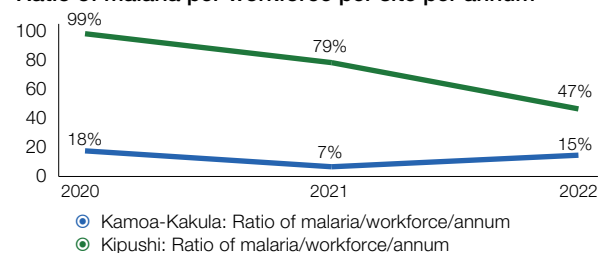
World AIDS Day, celebrated on the first of December each year, provides an opportunity to raise awareness around HIV, as well as to unite in the global fight against the virus. To mark this important occasion, Platreef held an awareness and testing campaign for all employees, contractors and community members, themed "Global Solidarity, Shared Responsibility". Through ongoing HIV awareness efforts, a total of 7,439 HIV/AIDS tests were conducted in 2022.

Occupational health

Our occupational health program requires that baseline health checks are conducted prior to employment and then routinely updated in order to both track employee health and well-being against pre-employment levels, and to evaluate the efficacy of occupational health controls and programs. We also conduct voluntary occupational wellness campaigns that support employees' capacity to look after their own health and well-being. Through these campaigns, markers for chronic conditions such as cholesterol and diabetes are timeously observed, and proactive, preventative measures implemented.

Ivanhoe Mines' health performance, 2022			
	Kamoa-Kakula	Platreef	Kipushi
Number of occupational medicals conducted	12,856	2,580	3,005
Number of patients seen at the occupational health clinic	19,869	1,416	329
Number of health inductions conducted	11,886	1,991	732
Number of patients tested for COVID-19	2,751	8,984	1,254
Number of employees vaccinated (COVID-19)	875	63	350
Number of patients tested for HIV/AIDS	5,941	7,439	2,935
Number of patients tested for malaria	5,435	n/a	2,928
Number of patients tested positive and treated for malaria	1,776	n/a	563
Total number of chronic patients seen and treated on a monthly basis (employees)	482	1,032	101

Ratio of malaria per workforce per site per annum



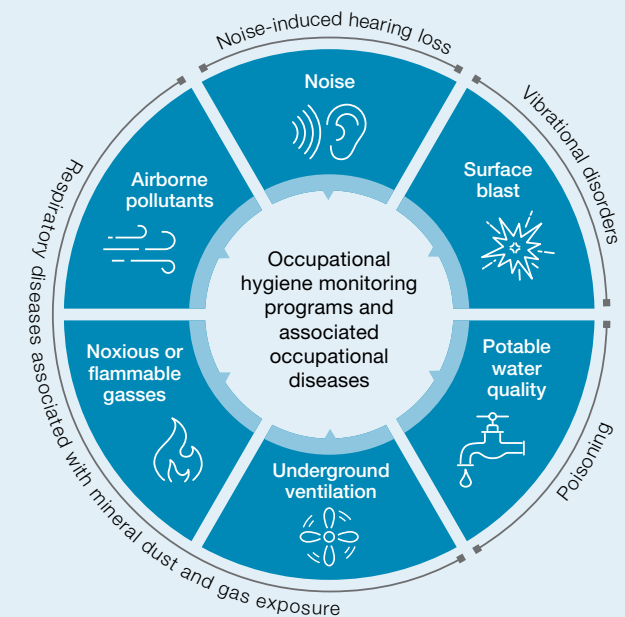
Auditory test for occupational health screening at Kamoa-Kakula.



Donation of an electric wheelchair to Max Molomo, HR Filing Clerk, by Ivanhoe's battery electric fleet supplier, Epiroc at the Platreef Project.

Occupational hygiene

We implement and continually review our occupational hygiene surveillance program and we conduct job-specific risk assessments to gain better insight into the exposure levels across all our projects. Corrective measures are implemented to address any deviations found. Our occupational hygiene surveillance program at Kamoa-Kakula currently includes potable water, underground ventilation and flammable gasses. Underground ventilation monitoring yielded two deviation reports and noxious/flammable gasses monitoring yielded two deviation reports, prompting operational changes in respect of the underground and surface fans to address these findings. During 2022, Kamoa-Kakula advanced occupational hygiene surveillance efforts by conducting baseline risk assessments for noise and airborne pollutants, with ongoing work planned to implement these programs in 2023. Comprehensive occupational hygiene surveillance programs are in place at both our Platreef and Kipushi Projects and both these projects reported zero deviations as part of their ongoing occupational hygiene surveillance programs.



Our community-based health initiatives

Community health and safety is a material concern to Ivanhoe Mines. Each of our projects has a dedicated community relations team that prioritizes engagement and support initiatives focused on community health and safety.

At Kamoia-Kakula, two health centres in the Mundjendje and Mwilu communities were constructed and equipped and will serve to benefit an estimated 3,149 people. Construction of the Muvunda Clinic has been completed and it has been fully stocked with 48 beds and four cradles. The clinic was handed over to the community and government and will open its doors in 2023.

Focused health stakeholder engagements included two major HIV/AIDS awareness sessions benefitting 726 stakeholders. Kamoia-Kakula also donated toward HIV activities by supplying petrol to the Kanzenze Health Centre for awareness sessions. A malaria awareness initiative, targeting pregnant women and children under five years old, benefitted 220 community members. During this event, 300 mosquito nets were distributed to 150 women in attendance. Throughout the year, 946 community members benefitted from health and safety awareness sessions.

At the Platreef Project, special attention was given to an HIV campaign. The HIV/AIDS epidemic still affects individuals, families and communities surrounding the Platreef Project. Despite the availability of antiretroviral drugs, many people choose to hide or ignore their symptoms due to the stigma associated with the disease. Several families lose parents, causing an increase in child-headed homes. Platreef hosted an event on World AIDS Day in collaboration with the Bokwalakwala Clinic in the community and the Mokopane Traditional Council (see page 50). The Bokwalakwala Clinic is a government clinic that is used day-to-day by our stakeholders in the community, where services in the form of children immunizations, chronic medication, education, family planning, preventing disease, promoting health, treating and curing disease are offered, thereby contributing to reduction of morbidity and mortality in communities. Other initiatives included a health campaign where 618 females benefitted from the donation of sanitary pads and products.

Our safety performance and initiatives

Our project sites have established joint management-worker H&S committees, where representatives from trade unions or employee fora are entitled to participate in meetings and in decision-making. We include female safety representatives in our H&S structures and committees, so that their specific H&S needs are not overlooked, e.g., inappropriate PPE items. We ensure the provision of appropriate high-quality PPE for our workforce, as well as any visitors entering operational areas of our projects. We are particularly cognizant of the risk of gender-based violence and strive to ensure the provision of safe, gender-appropriate sanitation facilities for our female workforce.

To ensure our employees meet our workplace H&S standards, we place a particular emphasis on H&S training and awareness. H&S training needs are assessed based on occupation and area, and captured on a training matrix, the outcomes of which are periodically reviewed to evaluate its effectiveness. We make use of monthly talk topics and safety shares to drive the key messages of our safety culture, as well as to foster a deeper understanding of any workplace H&S risks. While each of our projects are guided by the same OHS management system, they have all adopted their own safety brand and management style, tailored to suit their specific circumstances and reflective of their culture, vision, mission and values.

At the end of December 2022, the Kamoia-Kakula Copper Complex reached 1.53 million work hours free of lost-time injury.*

Regrettably, a fatality occurred on September 2, 2022, when Thatty Jean Serge Tshinikay lost his life following a fall of ground incident. Since the fatality, remedial safety interventions have been implemented. We extend our heartfelt condolences to Thatty's family and friends.

H&S inductions and training are run through the training centre. A total of 14,872 inductions were provided to contractors and employees for surface, underground, concentrator and refuge chambers by the training centre in 2022. Additional measures taken to enhance safety performance included an increase of mass meetings from two to four a week, an increase in emergency drills to improve emergency readiness, and an enhanced focus on Kamoia-Kakula's Kuwa Salama (Be Safe) Way.

**This figure has been restated in this version of the sustainability report, as it was incorrectly reported as 2.55 million work hours in our 2022 Sustainability Report published on April 13, 2022.*



Safety instruction demonstration at the Kakula Mine.



Kamoia-Kakula has defined and is working towards the implementation of nine core elements as part of its safety strategy. These elements comprise: safe leadership; safe contractors; risk management; fatal risk control management; incident investigation and learnings; operational safety; assurance; action focused; and management reviews. In 2023, Kamoia-Kakula is planning the roll-out of its revised Kuwa Salama Way approach, comprising actions to address 10 key risks and life threatening behaviors.



Recognition of the achievement of Kamoia-Kakula's contractor – Kongo River – of 4,000,000 LTI free manhours since Phase 1, handed over by Torra Engelbrecht, Managerial Leader III Construction, to Omoi Makori, Contracts Manager, Kongo River.

In 2022, Kamoakakula began a mandatory drug and alcohol testing program in an effort to ensure that employees do not work under the influence of substances and conveying that being inebriated or impaired by substances is unacceptable and prevents employees from carrying out their job safely. Along with this, Kamoakakula also provides employees with education, awareness and confidential counselling. Kamoakakula also implemented a Silly Season Campaign over a period of three months, aimed at discussing tailored topics on safety awareness. Further initiatives to foster awareness of the safety brand included distribution of gloves for a hand safety campaign, monthly safety comics on safety risk topics in Kamoakakula's La Tarifa Magazine and weekly demonstrations and talks on safety hazards.

As at the end of December 2022, the Platreef Project reached a total of 408,360 lost-time injury-free hours worked. Khumbul'ekhaya, which means remember home, is an industry-led strategy on H&S that has been developed alongside the Zero Harm Forum to drive and sustain the mining industry's pursuit of zero harm. The emphasis on "home" directly acknowledges that fatalities have the greatest impact on loved ones at home and encourages mineworkers and their managers to bear these loved ones in mind as they execute their day-to-day tasks.

The Khumbul'ekhaya and "Zero Tolerance" drive is achieved through:

- Upholding the right of personnel to refuse or withdraw from dangerous working places whenever the circumstances arise;
- Khumbul'ekhaya recognition and safety celebrations for no injuries;
- Green card positive safety reinforcement system only for near miss reporting;
- Weekly safety meetings;
- Fatigue management;
- Management of chronic illnesses and;
- Emphasizing on the VUCA system.

V

Vision

To create a safe future for all employees where all employees go home to their families unharmed.

U

Understand

Understanding the need to work safely, the tasks being undertaken, workplace conditions, the need to be fit for duty and the requirement to stop and fix.

C

Clarity

Clarity in respect of understanding and applying standard operating procedures.

A

Alarm

Duty to alarm or warn yourself and others of dangers.



In 2022, Platreef implemented the Khumbul'ekhaya house initiative to encourage and focus on being safe, placing an eight-panel house at the entrance to the mine, building the panels week-by-week, based on safety performance, and removing panels in the case of incidents, until the house is complete and a safety celebration is held to acknowledge the safety achievements. A Silly Season Campaign was also conducted, enforcing more regular alcohol testing, stricter management of employee health check-ups, talk topics and rewarding of good H&S behavior.



Platreef's Khumbul'ekhaya house initiative

At the end of December 2022, the Kipushi Project reached a total of 658,142 work hours free of lost-time injuries. Safety measures are taken regularly through daily safety meetings before every shift and supervisors and departmental heads performing monthly workplace inspections, and coaching workers in safety practices. The Kipushi Project's safety team plays a governance and oversight role, following up on action items and closing out inspections, as well as ensuring that the responsible supervisors remain accountable. In 2022, the Kipushi team focused their safety efforts on a variety of training interventions, as well as safety stakeholder engagements targeting artisanal and small-scale miners through which 1,450 participants were engaged.

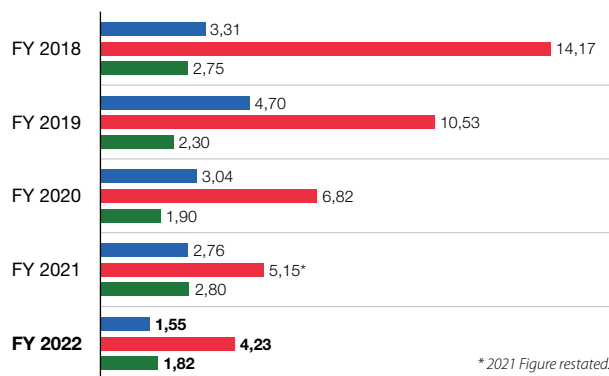
Ivanhoe Mines' workforce safety performance, 2022

	Kamoa-Kakula	Platreef	Kipushi
Lost-time injury frequency rate – total workforce	0.36	0.6	0.46
Lost-time injury frequency rate – employees	0.64	0.0	0.0
Lost-time injury frequency rate – contractors	0.26	0.59	0.46
Total recordable injury frequency rate	1.55	4.23	1.82
Number of medical treatment cases	26	6	3
Number of lost time injuries – workforce	9	1	1
Number of lost time injuries – employees	4	1	–
Number of lost time injuries – contractors	5	–	1
Number of fatalities – employees	1	0	0
Number of fatalities – contractors	0	0	0
Number of safety inductions conducted – employees	3,367	315	334
Number of safety inductions conducted – contractors	11,505	1,620	769
Number of safety inductions conducted – visitors	385	21	117
Number of safety-related training interventions	16	3	12
Number of employees who benefitted from safety-related training	2,592	78	482

Definitions: Lost-time injury frequency rate (LTIFR) = LTIs* 1,000,000/hours worked

Total recordable injury frequency rate (TRIFR) = (Fatalities + LTIs + RWIs + MTIs)* 1,000,000/hours worked

Total recordable injury frequency rate (TRIFR)

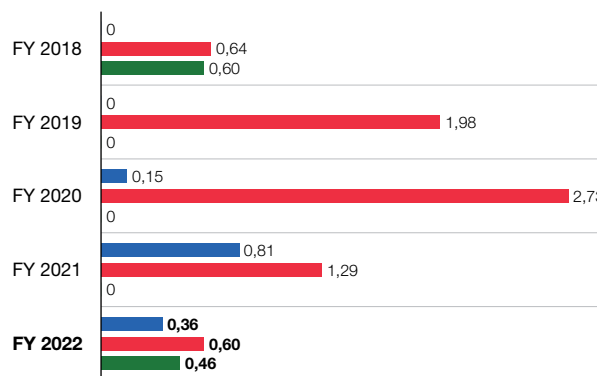


* 2021 Figure restated.

■ Kamoa-Kakula ■ Platreef ■ Kipushi

*2021 Figure restated

Lost time recordable injury frequency rate (LTIFR)



■ Kamoa-Kakula ■ Platreef ■ Kipushi

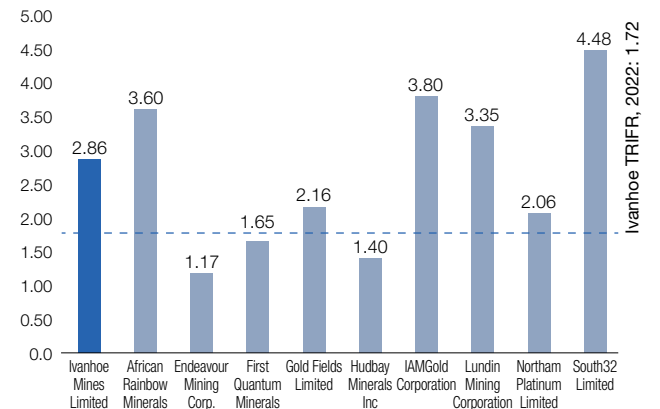


Miles Naudé, Head of Concentrators, handing out gloves to employees at the mine entrance during a hand safety campaign conducted by Kamoa-Kakula.



Magloire Kashiba, Managerial Leader II, Mining, leading the weekly safety meeting at Kamoa-Kakula.

Ivanhoe TRIFR relative to peer group



* Peer group data, 2021.

Our employee wellness

Ivanhoe strives to enhance the physical and emotional well-being of employees and contractors and encourages our employees to maintain a healthy work-life balance, as well as keep physically fit and healthy. Our employee emotional assistance program, launched in 2020, remains available for employees and their immediate families to access confidential specialist advice in several areas, including mental health, finance and legal.

At Kamo-Kakula, sport remains the top means for employees to keep fit and in 2022, a sports committee was established to look after the different sporting activities. Kamo-Kakula supports the various initiatives through the provision of uniforms and/or equipment.

A highlight from the wellness initiatives undertaken at our Platreef Project is a joint initiative undertaken with the Department of Mineral Resources and Energy (DMRE), promoting health and fitness, through football and netball matches.

Kamo-Kakula's wellness initiatives, 2022



The 2022 highlight for the **Kamo-Kakula Football Club** was participating in a sixteen-team soccer tournament against other mining companies and mining service providers in the local region. Construction of a new soccer field just adjacent to the Kamo camp is underway.



By the end of 2022, **Kamo-Kakula's cycling team** comprised 180 members, 85 of whom participated in a 26km/55km tournament, securing 12 of the top 15 spots. A new cycling workshop, set to launch in early 2023, will include community members who will be trained in servicing bicycles and running the workshop.



Kamo-Kakula's indoor cricket facility houses 11 teams in league games all year round. As the interest grows among women and local employees who have not played cricket before. Additional equipment ordered in 2022 and a planned double net indoor arena will enable more employees to get involved in sport, as well as cater for indoor netball.



The 2022 **social events calendar** included dance evenings, movie nights, gospel shows, language classes, a beer fest, art and wine workshops, Kamo-Kakula's Strongest Man Competition, basketball- and volleyball matches.



Platreef employees partaking in a netball and soccer match during a Wellness Day hosted by the Department of Mineral Resources and Energy.



Joyce Kgopa and Mongezi Phekezela receiving their mountain bikes following the winter challenge.

Joyce and Mongezi – employee wellness

In 2022, Ivanhoe sponsored a wellness initiative at the corporate office in Sandton. This challenge, which took place over the winter season, encouraged teams to achieve weekly fitness goals, by competing for various active-related prizes. The winning team received mountain bikes, with runners up receiving new trainers. Notwithstanding that there are several athletes in the Ivanhoe employee contingent, the winners of the competition were from the office administration department, highlighting just how much activity they undertake daily.

Crisis management planning and emergency preparedness

Ivanhoe Mines recognizes that natural disasters and mining activities can pose significant health, safety and environment (HSE) risks to personnel and communities and that certain risks, if not managed properly, can become life threatening. Climate change, urbanization and the degradation of natural ecosystems are drivers of more frequent natural disasters such as droughts and floods. These events could have a devastating consequence on people, organizations and property, exposing already vulnerable communities to even greater risk.

Furthermore, tailings management, geopolitical tensions and social unrest pose a risk to our people and infrastructure. Therefore, we see it as a business imperative to recognize and assess potential disaster risks, to mitigate the potential impact of such risks and to play a positive role in protecting our people and environment.

At Ivanhoe, our commitment to readiness entails that we are properly equipped and staffed to handle any form of emergency. Each of our mining projects has its own Emergency Response Plan and has personnel trained to respond safely and expeditiously to medical, fire and environmental emergencies. Safety is enhanced through our access control systems. Protocols for an emergency control room and crisis communication have also been established, regular drills are conducted, and each project has all the required response equipment.

We have trained our security personnel for the unlikely event of social unrest. Pursuant to Ivanhoe's commitment to respecting human rights as outlined in international frameworks and standards such as the United Nations Guiding Principles on Business and Human Rights, the Voluntary Principles on Security and Human Rights and the International Finance Corporation's Performance Standards, we provide clear guidelines regarding the use of force, as well as training in this respect.



Security personnel from G4S at the Joint Operations Centre at Kamo-Kakula.

Special Report

Kamo-Kakula launches the Rochelle de Villiers Joint Operations Centre

A fitting tribute to Kamo-Kakula's former Chief Financial Officer, in 2022, Kamo-Kakula launched its new world-class Joint Operations Centre (JOC), named after Rochelle de Villiers. This state-of-the-art security centre uses cutting edge security technology, such as drones, CCTV networks and radar tracking towers to ensure that responses to incidents on site are rapid and effective. This new facility was built to allow different departments and first responders to coordinate their responses to emergency events and security incidents such as trespassing, fires, criminal activity, or vehicle accidents. A team of controllers works in shifts to provide around-the-clock security coverage and provide a 24/7 dispatch facility, supporting the activities of fire fighting, medical and other services. Additionally, a new, progressive seven-step training course was implemented at the JOC, with each new course being based on training in special activities such as advanced driving, patrolling, escorts, rapid action and intervention, and VIP protection.

Highlights of Ivanhoe's 2022 emergency preparedness planning

Kamo-Kakula completed its first successful DRC police training course, with 16 students officially sworn in as Judicial Police Officers

Platreef conducted training sessions on occupational health, first aid and emergency evacuation, as well as implemented a Mandatory Code of Practice for Emergency Preparedness and Response, and a standard operating procedure for Emergency and Crisis Management

Kipushi's employees received training in first aid, defensive driving, radio activity, fire extinguishing, medical management and basic life support



[Video link](#)

Special Report

Kamo-Kakula's EMS team – calm, but capable!

Kamo-Kakula's Emergency Medical Services (EMS) team, comprised of nine highly skilled medical, fire and rescue services personnel, is a stellar example of hard work and efficiency, providing hazmat and aeromedical incidents and disaster backup for the mine and its surroundings. Physical and mental preparedness, a commitment to lifelong training, and the ability to remain calm in a crisis are prerequisites for this important role. On an average day, Kamo-Kakula's EMS team responds to about three incidents and during quieter periods, they upskill themselves in running emergency underground trauma and medical drills. Vehicle- and equipment checks for fire response, activating medical evacuations and internal first aid training is performed regularly.

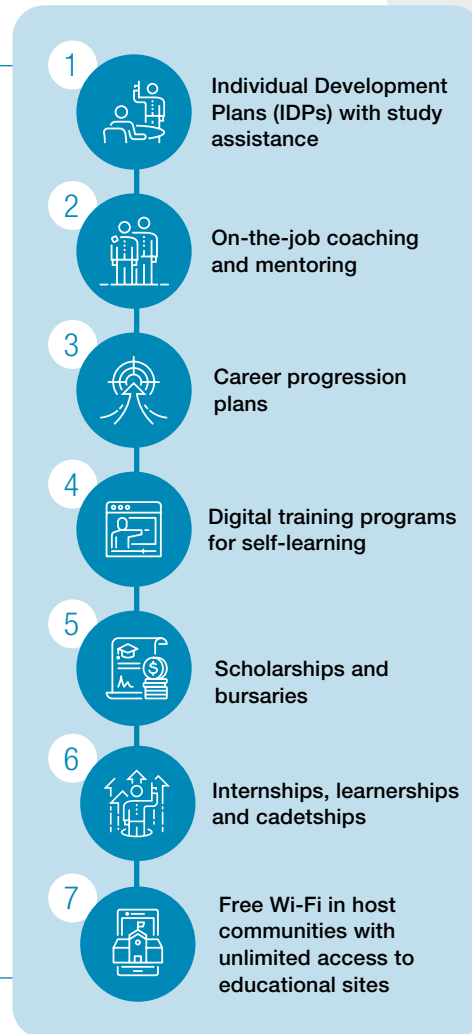
MATERIAL TOPIC

Skills for the future



Employee skills development

As technological innovation, digitization and automation continue to take centre stage, the evolving occupational landscape now requires a new type of highly skilled workforce. Ivanhoe Mines is committed to developing our most precious resource – our people who work passionately and tirelessly to advance our Company’s mandate. We recognize training and education as a material issue for our internal and external stakeholders and therefore prioritize these opportunities. We recognize star performers as part of a pool earmarked for succession and endeavour to fast-track their development. Skills transfer programs seek to progress our local employees into managerial roles. We are also actively expanding our female workforce, focusing especially on gender inclusion at our DRC projects, where traditional barriers to entry have had to be overcome. In order to harness the skills necessary for the organization’s current and future needs, we have implemented strategic, comprehensive human capital development programs which are aimed both at employees, as well as host community members.



Ivanhoe Mines' employee development programs, 2022





Minty Cai, Chief Executive, Finance, facilitating a transformation workshop at Kamo-Kakula.

Our human capital development program at our Kamo-Kakula Copper Complex takes cognizance of the relatively remote setting of the project, the multi-cultural workforce, our commitment to local employment and gender inclusion, the expansion of the mineral resources, and the need for a future, skilled, local workforce. Striving to meet this need, Kamo-Kakula has established a world-class mining training centre at Kansoko, which boasts state-of-the-art simulators and training programs, as well as a strategic cadet training program, for local community recruits focusing on a meaningful set of competencies. It also provides technical skills training for the rapid deployment of mining crews within the Kamo-Kakula Copper Complex. In 2022, two crews of process cadets and mining cadets were enrolled in the program, 37% of whom were female. At Kamo-Kakula we work hard to ensure that local employees are integrated into managerial roles. To accomplish this, we have devised various ways to recognize and nurture the development of Congolese nationals. Our programs involve providing training, mentorship, teaching transferable skills, giving support with studies, and carefully considering potential successors. In 2021, Kamo-Kakula launched the Kipaji program, crafted to fast-track a talent pool of Congolese employees to management roles. In 2022, 90 key positions were identified for succession planning for identified local employees, all of whom are enrolled in a skills transfer program and 30 employees were enrolled in Kamo-Kakula's Kipaji development program.



[Video link](#)

Special Report

Harnessing local talent through Kamo-Kakula's Kipaji development program

Transformation initiatives, such as the Kipaji development program, are geared towards meeting the objectives of employee development for succession planning. Tools such as IDP play a significant role in ensuring that Kamo-Kakula prioritizes and pursues professional employee development. In 2022, the Kipaji development program candidates were afforded the opportunity to attend the Psychology of Leadership Course delivered by Emerge Leadership Academy and the Management Development Program delivered by Stellenbosch Business School, as well as the opportunity to select a mentor from a pool of seasoned industry specialists currently working at Kamo-Kakula and other affiliated companies. Significant strides are being made as they are progressing through their developmental journeys with the guidance of their mentors.



Training of the surveyor team at Ivanhoe's Kipushi Project.

At our Kipushi Project, the employee skills development program is based on the progressive need for a variety of skills as the mine readies for production. A formal skills transfer program is underway, through which expatriate workers and highly skilled nationals build the skills of local employees.

Our Platreef Project is guided by operational requirements and those mandated by the project's SLP, as well as the requirements of the Mining Charter and employment equity legislation. The SLP is crafted, implemented and reviewed in five-year intervals and is regulated by South African mineral legislation. The 2022 reporting year marked the second year of implementation of Platreef's second SLP. During 2022, Ivanhoe continued the equipping of its training centre, striving towards our vision of being a "Mine of the Future".

Community skills development

Ivanhoe Mines prioritizes training and education opportunities for host communities. We recognize that our projects are situated in emerging economies where discrepancies exist between the skill and educational levels of a significant portion of individuals in our host communities, and the skills required for employment at the mining projects or for establishing and growing a successful local business. We invest in adult literacy and education, scholarships and bursaries, livelihood projects and training interventions that enable community members to improve their living conditions and socio-economic status.



Ivanhoe Mines' Community Training Intervention Beneficiaries, 2022

	Kamoa-Kakula	Platreef	Kipushi
Core-to-mining	30	13	110
Non-core-to-mining	417	139	50
Adult literacy	300	18	354



Video link

Special Report

Education for all ages

Ivanhoe invests in adult education, in partnership with Alfa Congo, a Congolese non-governmental organization, to help improve reading, writing, and basic arithmetic for residents living near the Kipushi Project.



Community leaders celebrate the send-off of their young residents participating in the group of Platreef cadets preparing to travel to the Murray & Roberts Training Academy.

In 2022, various directly affected community members at our Platreef Project were awarded an opportunity to expand their knowledge and increase their employability opportunities through portable skills training that included:



29 candidates

in a professional cooking skills program



Lucia Lebelo, Employee Training and Development Manager, Platreef Project.



24 candidates
in upholstery training



20 candidates
in a Code 10 Drivers' Licence Program

Special Report

Platreef's cadets are ready for the future

Gearing up for Ivanhoe's 'Mine of the Future' at Platreef, 50 candidates, 42% of which were female, from surrounding communities were put through a cadetship training program offered in collaboration with the Murray and Roberts Training Academy. The program included technical training on different mining equipment, as well as on H&S principles. In addition to the 50 recruited for the cadetship, 15 candidates were recruited as Cadet Graduate Operators to train the new cadets on basic mining principles, such as trackless mobile machinery operations, to enhance their development for higher positions in the future.

Building intellectual capital through quality education and industry innovation

Ivanhoe Mines defines “intellectual capital” as knowledge that can be used to produce stakeholder wealth. Intellectual capital is encapsulated in our human capital, and is carefully considered in our recruitment, retention and training strategies. This includes the structures supporting employees in their work, such as information management systems. We are determined to improve the lives of our employees and other stakeholders and we will achieve this by investing in our intellectual resources, leveraging collective wisdom from sharing best practices, and pioneering groundbreaking solutions through successful projects.

We recognize the range of opportunities for Ivanhoe Mines, as a key role player within the modern mining sector, to broaden the scope and increase the effectiveness of our innovation agenda throughout the business, from mining exploration, technology and information systems, to people management and research and development. We regard education and innovation as critical business imperatives and we contribute to SDG 4 by investing in quality education in our workforce and host communities, thereby further reducing inequalities, as well as advancing our people through investment in technology, research and innovation.

Resource development

Ivanhoe Mines prides itself on the discovery and development of three highly unique mineral deposits which bear the “green metals” needed for the transition to a lower carbon economy. Our geological experts come from varied backgrounds with experience in a wide range of environments, deposition styles and ore types. This broad base of experience provides a competitive advantage that is used to drive and support mineral resource development within the Company. This experience

base is further supplemented by consultants that are considered to be the best in their field, and by significant involvement of academia (individuals and academic institutions), which further enhances the intellectual capital of the Company. This wealth of knowledge is being passed on to local employees at our projects, through skills transfer programs and on-the-job training, as well as specialized training at Canadian institutions.

Significant volumes of data are collected using a variety of techniques to provide insights into our geological controls. Underground exposures have further enhanced the understanding of geological controls on mineralization. Employees are driven to understand these controls, and exploration is guided with great success by the insights obtained. Natural systems are difficult to understand and model – and are harder still to predict. Targeted exploration at Kakula West and Kamo North are testimony to the success of our proprietary exploration model.

Our executive management’s willingness to support mineral resource development, and to take the necessary risks, has allowed the Company to realize the wealth inherent in its intellectual capital through the investment in resource development.

Mine development

International contractor teams and mining experts, who bring diverse development and operational experience, have been specifically tasked to recruit and train local mining crews and build intellectual capital. Unique ore bodies, mined by these trained local teams using innovative techniques and state of the art equipment, ensure that Ivanhoe Mines continues to build the knowledge-based assets required to realize the wealth of its many discoveries.



Christelle Nkulu, Geologist, inspecting core at the core shed at Kamo North Mine.



Ismael Kayembe, Surveyor, plotting the daily advance at the Kakula North Mine.

Information management systems, information communication and technology

Ivanhoe Mines continues to place a premium on the integrity and security of information that comprises its intellectual capital. Comprehensive, specialist data management systems have been implemented to manage the functions of Enterprise Resource Planning (ERP), finance, risk, health, safety, human resources, payroll, environment and mine planning. Dynamic information-sharing and stakeholder engagement with internal and external stakeholders are enabled via Company portals.

Group applications are implemented and maintained through an applications strategy and group policies in a sustainable and responsible manner for efficiency in business functions, with the ability to measure performance metrics across the group. The Company holds regular steering committee meetings to effectively manage these group applications with inputs from the group and its operations.

A portfolio of projects is run to introduce new applications and functions, while established applications are supported by a hybrid support team consisting of internal personnel and contracts with specialists.

Significant application projects currently running include:

- The implementation of a new human resources application, including human resource records, payroll, performance management, training and appointments, that are synchronized to the tax years of the various jurisdictions of our operations;
- The migration to an ERP platform that will allow continuous updates to keep the application relevant, without the need to conduct large reimplementation projects;
- Centralized reporting and dashboard applications;
- Fleet equipment performance measurement systems in our development areas;
- Updates to the HSE management application to align with respective operational jurisdiction requirements.

Our various group applications fit into a matrix of applications that is managed as a unit through regular architectural inputs and services. We strive to ensure one owner per data element to prevent duplication and define the integration requirements. Outputs from the architecture services include diagrams, drawings, function lists, process flows and data indexes.

During 2022, a number of information technology policies were reviewed and aligned with the corporate policy and best practice standards. A significant investment into information technology and management systems was made during 2022, with further investments planned for 2023. IT strategy updates are provided to the Audit Committee on a quarterly basis for information, input and guidance.

Ivanhoe Mines recognizes that we have a responsibility to protect both our own and third-party data, either held, processed or stored by the organization, and that by protecting this data we can ensure that we maintain our reputation as a trusted employer and partner, enabling us to grow as a business and deliver on our strategic objectives. To demonstrate our commitment to information security, we implement industry best practice security controls and assure the effectiveness of our controls, which are aligned to ISO 27001, the global standard for managing information security. During 2023, we will implement steps towards obtaining ISO 27001 accreditation, demonstrating our commitment to aligning to international best practice standards.

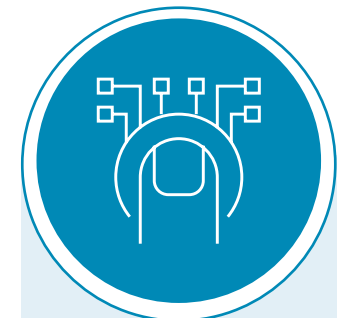
It is the responsibility of all our staff, regardless of their role within the organization, to become familiar with our security management processes and to comply with all information security and privacy policies and the procedures that underpin them. In turn, we commit to ensure that our security management systems and processes are efficient, effective and that Ivanhoe will strive for continuous improvement in respect of the protection of our data assets. Our commitment towards data security and privacy is driven by our executive management, who require all our employees, whether permanent or temporary, partner organizations, suppliers and contractors to do the same.

Ivanhoe Mines is committed to a “sustainable ICT approach”, therefore we continuously review our programs and implement the following optimization strategies to achieve this objective.

- Review and reduce power consumption when upgrading ICT hardware.
- Adopt newer operating systems and technology, which allow computers and other hardware to be put into sleep mode during periods of inactivity.
- Promote the implementation of server virtualization.
- Explore desktop virtualization using ultra small and thin clients on the desktop to reduce power consumption.
- Deploy integrated telephony by replacing stand-alone handsets with soft phone clients on computer workstations.
- Digitize manual processes to reduce paper consumption.
- Promote the use of efficient virtual platforms to reduce the need for travel, effectively reducing GHG.

In order to protect the organization against the threat of cyber-attacks, we conduct thorough of penetration tests annually through a third-party security assessment firm, to proactively identify and mitigate any potential risks and vulnerabilities of our systems. Our network infrastructure and servers are protected by high-availability firewalls and are configured for the detection and prevention of various network security threats.

We have also implemented a number of controls to identify, authorize, authenticate and manage individuals’ access to our systems and information assets. In 2022, we deployed an online cybersecurity awareness training program to ensure that our workforce maintains awareness of evolving cyber threats and relevant counter-measures.





Chuene Matlala, Social Compliance Projects Officer, participating in Ivanhoe's food security initiative, held to celebrate Mandela Day in July 2022.

5

OUR PROSPERITY

Ivanhoe Mines strives to foster prosperity, shared value and inclusive growth for all our stakeholders. We are committed to continual improvement in social performance and to continue contributing to the social, economic and institutional development of our host countries and communities.

Our commitment and approach to prosperity

Ivanhoe Mines has aligned its strategic direction with the goals of the UN's 2030 Agenda for SDGs in seeking to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social and technological progress occurs in harmony with nature.

The WEF SCM approach highlights the importance of prosperous societies and the role of businesses in fuelling economic growth, innovation and shared wealth. A company's value is increasingly reflected in the off balance sheet intangible assets and value drivers associated with economic and social prosperity, and stakeholders are increasingly interested in these non-financial parameters of company performance. Now, more than ever before, it is critical that miners translate corporate strategies, policies and ideals into real, on-the-ground actions that secure sustainable livelihoods for their workforce, host communities and host countries.

Securing socio-economic development

Socio-economic development opportunities, particularly for vulnerable people, was identified in our 2022 materiality assessment as a key material impact of our business on stakeholders. We appreciate that amongst the critical foundations of a sustainable mining operation is the ability to create inclusive, shared value by contributing to the social, economic and institutional development of the host countries and communities in which we operate. We also recognize that the foundations of our social licence to operate are reinforced by economies which are equitable and inclusive. We seek to create significant economic value for employees, stakeholders and wider society through job creation and investing in the productive capacity of the economy. This includes dedicated support for training, as well as enterprise and supplier development.

Creating and distributing value

We are committed to creating positive economic impacts through the value we create and distribute. Our sustainable development strategy seeks to provide a platform for economic growth and diversification in order to create thriving, self-sustainable communities beyond life of mine. This fosters the alleviation of poverty through equal access to both infrastructure and opportunities, building educated workforces, resilient communities, and sustainable cities. We recognize the importance of regional economic development and we strive to consciously and continuously maximize these positive impacts as a result of our operations, and to further multiplying the scope of these benefits through collaboration with key stakeholders in our sector.

Securing sustainable development

We strive to implement sustainable development initiatives in our host communities. This enables community members to secure resilient livelihoods, even after mining ceases, and enables us to contribute towards the development of infrastructure and services for sustainable cities and communities of the future. This is supported by our strategic goals to attain optimum returns on our investments in strategic infrastructure, education, and capacity-building initiatives, measured through outcomes-based assessments.

Local procurement

We are committed to engaging with and supporting local suppliers for all phases of the mining life cycle, to promote local procurement in our value chain. Local procurement was identified as another key material matter in our latest materiality assessment. Our operations can and must play an active role in inspiring and accelerating the formalization and growth of small-, micro- and medium-sized enterprises (SMMEs). In doing so, we stimulate entrepreneurship, indirectly generate additional employment opportunities, and contribute towards community development and livelihood creation.

Innovation, research, and development

From an innovation, and specifically research and development, perspective, we are proud of the work done in resource development where we have a distinct advantage. We collaborate with academic institutions and students to advance innovation and knowledge in the geology, mining and sustainability faculties.

Financial performance

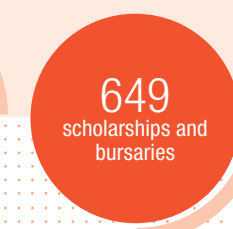
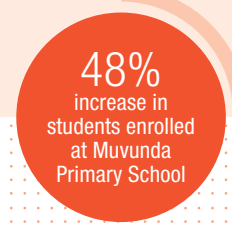
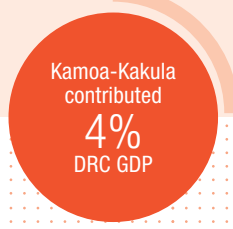
Our financial performance is primarily affected by operational results at the Kamoia-Kakula Copper Complex, which has been generating revenues from mining operations since reaching commercial production in July 2021. Ongoing exploration and development activities at our projects affect our financial performance. This section details Ivanhoe's contribution to local and national economic growth in the countries in which we operate. For more information regarding our financial results for the year ending December 31, 2022, please refer to the Company's audited consolidated annual financial statements and Management's Discussion and Analysis (MD&A) at:

www.ivanhoemines.com
www.sedar.com

Pursuant to our commitment towards SDG1, we aspire to contribute to the eradication of extreme poverty by improving accessibility and stimulating local economies to create sustainable change.



Alignment with Ivanhoe's Priority SDGs

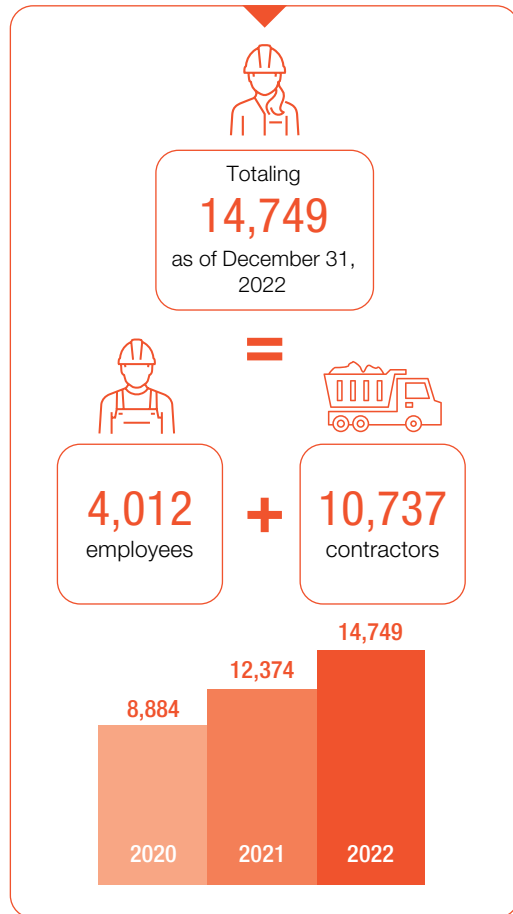


Employment and wealth generation

Employment

Ivanhoe has consistently been creating opportunities for employment through the development of our projects.

Our workforce increased by **19% from 2021 to 2022**



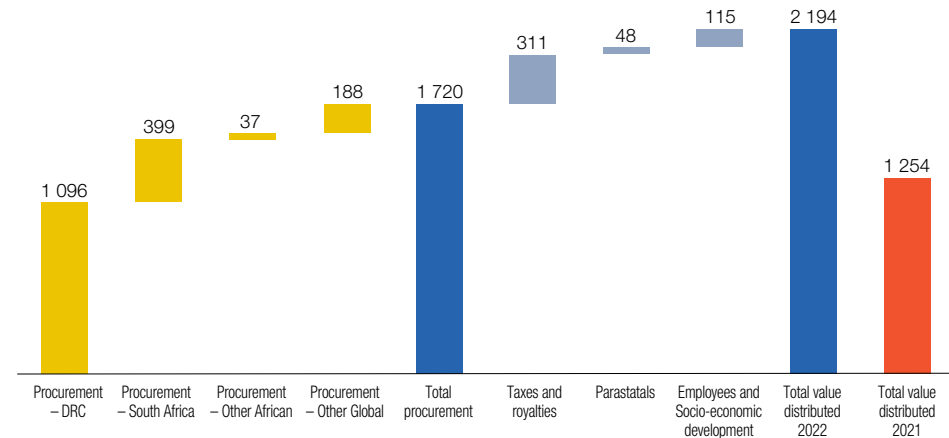
Total value created and distributed

Ivanhoe Mines' principal projects are being developed in emerging economies. We aim to maximize the value of our economic contributions to create enduring social and economic benefits – we want to leave a lasting, positive legacy in the countries and communities where we operate. We acknowledge the importance of monitoring and disclosing the impacts our projects have on regional and national economies in our footprint areas.

Our economic contributions include taxes and royalties paid to local and national governments, payments to parastatals, salaries, investment in socio-economic development, and procurement.

In 2022, Ivanhoe Mines together with our joint venture partners created and distributed a total value of \$2.2 billion, provided \$246 million in taxes and \$95 million in wages and benefits. Although we do not measure the direct and indirect economic impact of employee wage spending on local goods and services, it is an important factor in our economic contributions to our host communities. The tables that follow show the total value created and distributed by Ivanhoe Mines during 2022, as well as 2021.

Total value distributed (\$'millions)



Concentrate trucks leaving the 16km truck stop at Kakula, Komoa-Kakula Copper Complex.

TOTAL VALUE CREATED AND DISTRIBUTED 2022**

Project	Government					Employees and SED		Procurement				Total	Value Distributed Per Location			
	Payroll tax	VAT paid/ (net refund)	Royalties	Other tax	Parastatal Companies	Employees	Socio- Economic Develop- ment	DRC	South Africa	Other African	Other Global***	Value Distribution	Democratic Republic of Congo	South Africa	Other African	Other Global
Kamoa-Kakula*	50,456,398	132,851,225	65,273,172	34,383,627	43,283,880	65,034,366	15,106,139	1,064,140,544	261,061,413	36,728,982	160,315,234	1,928,634,980	1,470,529,351	261,061,413	36,728,982	160,315,234
Platreef	4,364,151	131,163	-	-	1,055,342	9,673,494	2,377,366	-	106,507,086	-	4,007,503	128,116,106	-	124,108,602	-	4,007,503
Kipushi	5,591,194	3,778,644	-	1,799,425	3,271,292	9,146,586	1,966,902	23,971,391	11,959,118	350,413	1,824,190	63,659,155	49,525,434	11,959,118	350,413	1,824,190
Exploration	-	-	-	367,770	-	1,498,835	-	6,571,214	2,770,208	-	1,037,426	12,245,453	8,437,819	2,770,208	-	1,037,426
Group Services	11,070,368	(78,106)	-	1,033,811	11,695	10,394,644	209,083	1,245,174	16,264,029	58,585	20,823,309	61,032,591	4,439,537	35,618,160	151,585	20,823,309
TOTAL	71,482,111	136,682,926	65,273,172	37,584,633	47,622,209	95,747,925	19,659,490	1,095,928,323	398,561,854	37,137,980	188,007,662	2,193,688,285	1,532,932,141	435,517,501	37,230,980	188,007,662

TOTAL VALUE CREATED AND DISTRIBUTED 2021**

Kamoa-Kakula*	26,318,056	70,755,982	26,653,149	30,356,602	44,961,044	56,619,405	7,509,542	527,276,771	197,276,515	19,990,448	75,865,291	1,083,582,805	790,450,551	197,276,515	19,990,448	75,865,291
Platreef	3,135,022	(5,170,551)	-	-	370,731	7,954,022	1,190,969	-	36,037,462	-	6,758,467	50,276,122	-	43,517,656	-	6,758,466
Kipushi	4,124,786	1,004,378	-	895,065	4,128,822	7,458,053	568,244	6,626,823	2,405,955	381,320	253,544	27,846,990	24,806,170	2,405,955	381,321	253,544
Exploration	-	-	-	704,399	2,698	956,590	-	13,949,881	3,852,432	-	347,290	19,813,290	15,613,568	3,852,432	-	347,291
Group Services	9,019,136	1,482,654	-	389,771	26,026	11,723,786	231,297	2,195,412	17,836,358	-	29,603,263	72,507,703	4,813,473	38,090,967	-	29,603,263
TOTAL	42,597,000	68,072,463	26,653,149	32,345,837	49,489,321	84,711,856	9,500,052	550,048,887	257,408,722	20,371,768	112,827,855	1,254,026,910	835,683,762	285,143,525	20,371,769	112,827,854

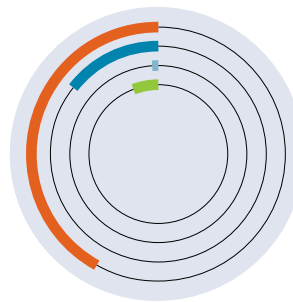
* Total value created and distributed for the Kamoa-Kakula Copper Complex is reported on a 100% basis (and not only on Ivanhoe's 39.6% interest in the Project).
 ** The amounts in the table have been translated to US Dollars at the average exchange rate for the 2022 and 2021 financial year of assessment where applicable.
 *** Other Global was not included in the total value distributed published in the 2021 Sustainability Report.

Value Distributed (\$'000s)



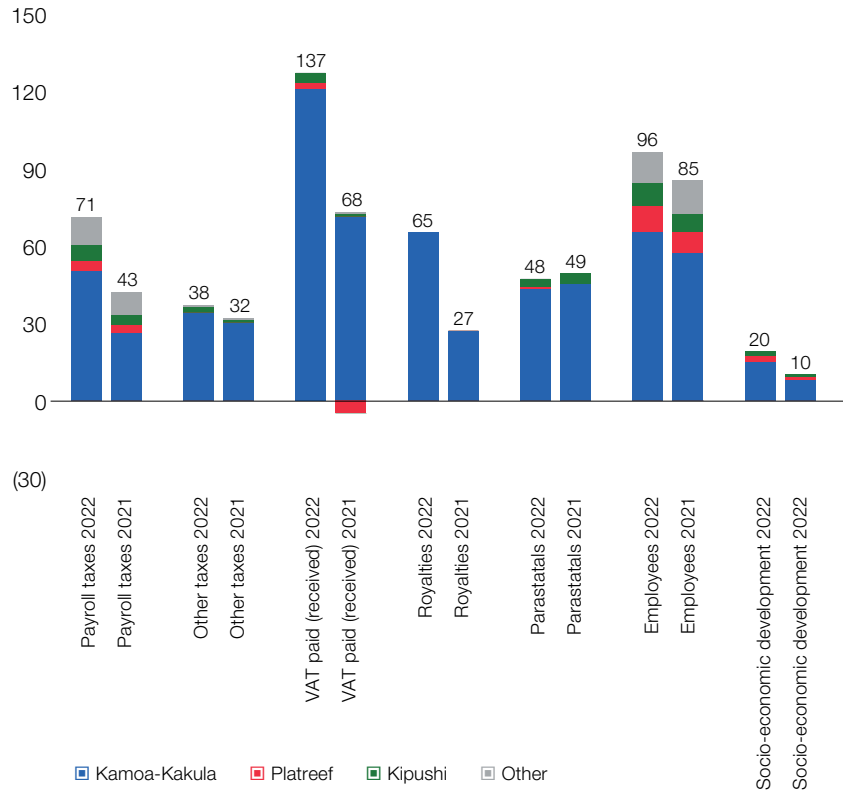
2022	
DRC	1,532,932
South African	435,518
Other African	37,231
Other Global	188,008

Value Distributed (\$'000s)



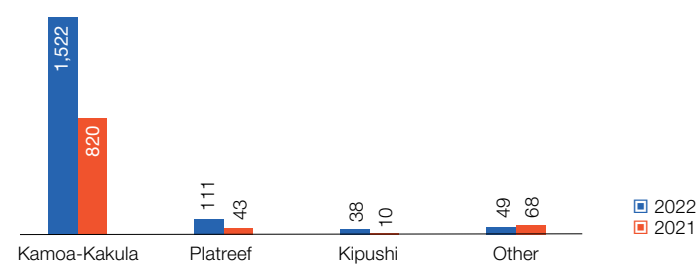
2021	
DRC	835,684
South African	285,144
Other African	20,372
Other Global	112,828

Direct value distributed – Non-procurement spent (\$'millions)

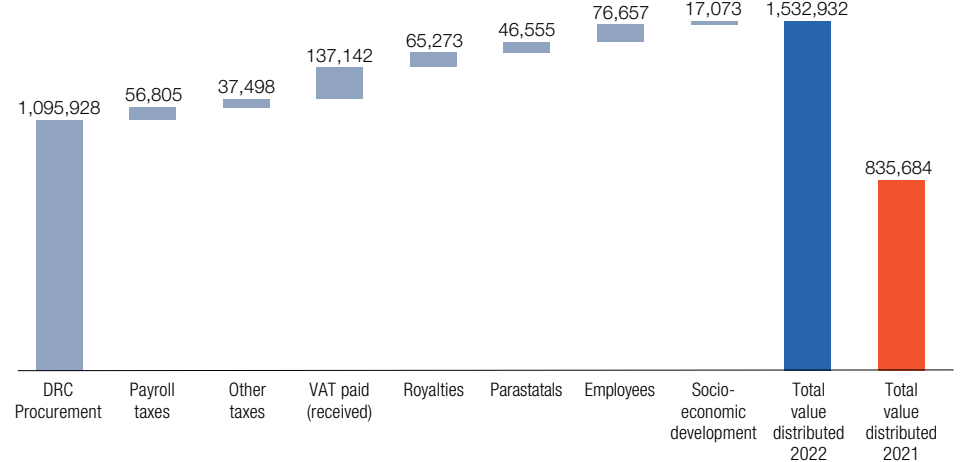


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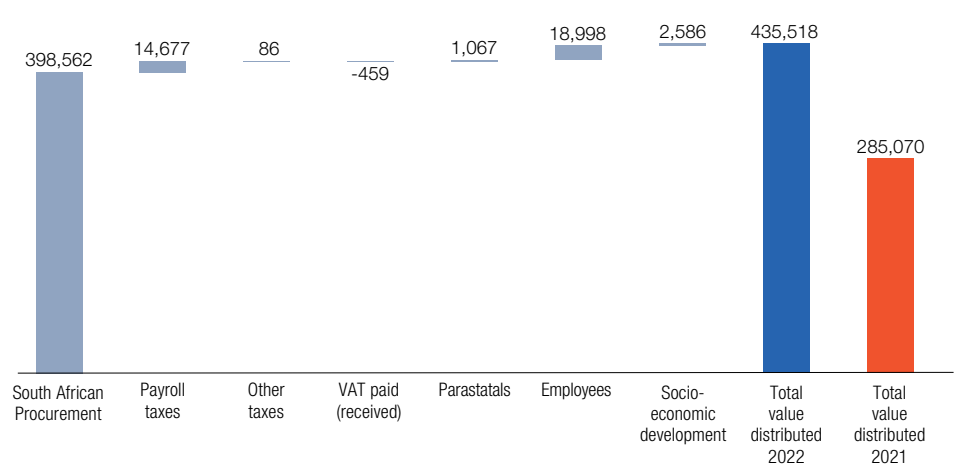
Direct value distributed – Procurement spend (\$'millions)



Total value distributed – DRC (\$'000)



Total value distributed – South Africa (\$'000)



MATERIAL TOPIC

Our approach to local procurement

Given the materiality of our impacts on local procurement, Ivanhoe Mines' commitment and approach to local procurement is underpinned by the following components:

For purposes of this Sustainability Report, we define "local procurement" to be in-country procurement in our specific countries of operation – the DRC and South Africa. In 2022, our Projects spent \$1,2 billion on the procurement of goods and services in the local context.

Alignment with and adoption of the LPRM standards of practice
As early adopters of the local procurement reporting mechanism (LPRM), we are committed to transparency regarding our procurement disclosures.

Integration of our supply chain policy and supplier code of conduct
Based on the OECD Guidelines, Ivanhoe's group supply chain policy outlines the vetting process that must be undertaken at the onboarding and existing relationship stages of supplier contracting, addressing (among others) anti-corruption and money laundering, human rights abuses and HSE issues.

Training and ongoing due diligence of suppliers
Ivanhoe supports local enterprises by creating significant opportunities across the value chain. We conduct regular, ongoing due diligence of contracted suppliers to ensure (among others) compliance and alignment with the Company's policies and controls.

Implementation of internal procurement systems and controls

Implementation of Enterprise and Supplier Development (ESD) programs
To promote and facilitate access to business opportunities, we have instituted ESD programs through which we provide workshops, entrepreneurial training, and assistance to local suppliers. In 2022, Ivanhoe Mines' key supplier initiatives included:

325 formal local enterprises supported	7 informal local enterprises supported
4 business conduct training sessions	
19 categories of work ring-fenced for local suppliers (for example, waste services, catering services, and construction supply)	

Development of local community procurement strategies
We are committed to supporting localized procurement in our host communities within each project's social area of influence. Each project applies their own methodology for purposes of categorizing suppliers for local procurement and implements a unique and contextualized local procurement strategy.

Setting internal procurement targets
We set internal targets to ensure that the development of our projects brings direct benefit to local businesses through our supply chain, whilst ensuring that our commitments are passed on to our contractors and suppliers.

Continuous improvement
We are growing our procurement and ESD teams and are looking to enhance our assessment tools and efforts in respect of supply chain management, which we intend to prioritize in 2023.
We are continually improving our relationships with suppliers through training methods, as well as increasing the frequency of communication. This has boosted reliability, credibility, safety, accountability, and compliance throughout our procurement cycle.



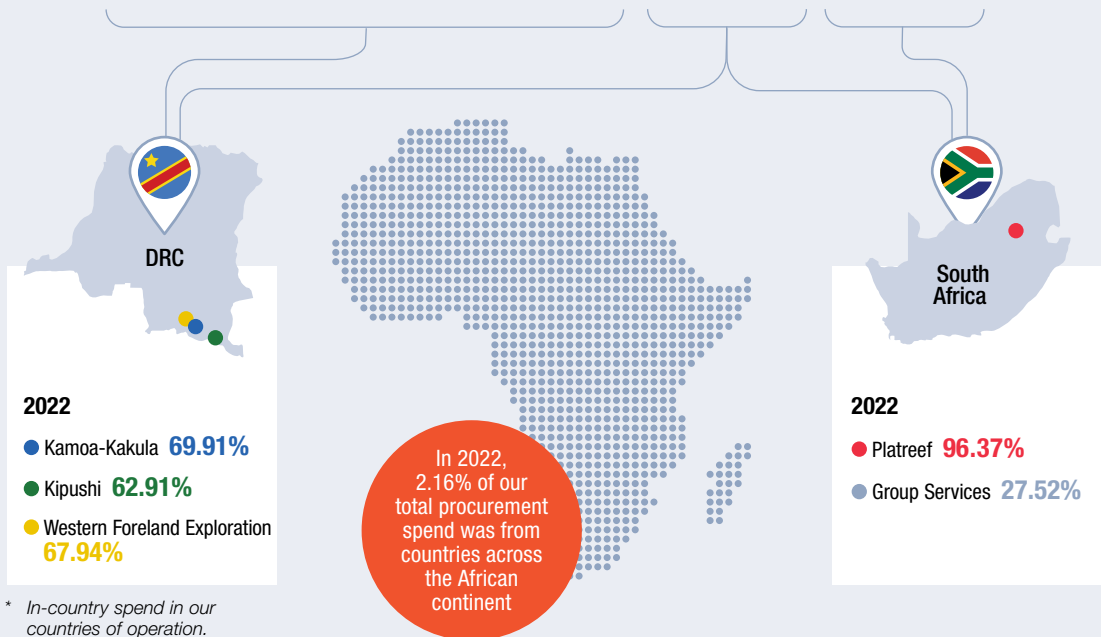
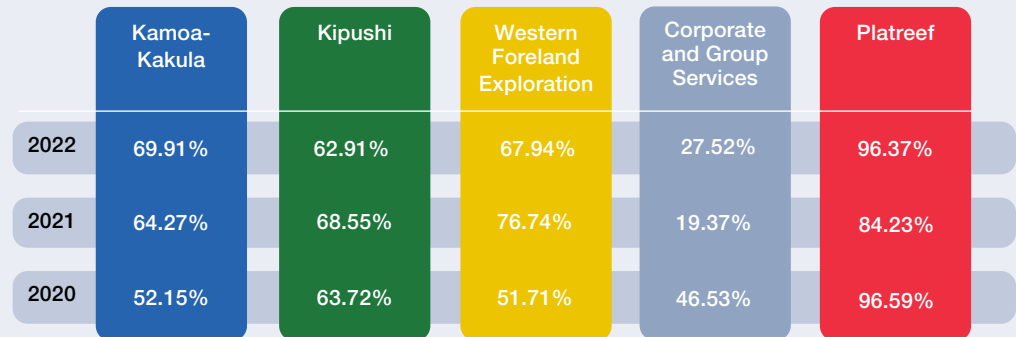
Our commitment to sustainable development is also applicable to all local contractors, such as Majengo, at Kamo-Kakula.

Contractor local procurement responsibilities

Ivanhoe's commitment to sustainable local development extends to our contractors and service providers. Through our Contractor Compliance Framework, we seek to ensure that our contractors embody our values and objectives.

	Kamo-Kakula	Platreef	Kipushi
Number of key suppliers/business partners.	44	10	12
Number of contractors on site	59	36	19
Systems and controls Ivanhoe has put in place to ensure appointed suppliers are reputable/legitimate and to ensure they promote and respect Ivanhoe policies and procedures when on site	Tender vetting, Vendor Portal, commercial contracts, SOPs, tendering process, adjudication process, contractor pack and framework.		
Supporting local enterprises with contracting opportunities	Facilitating international partnerships and local recruitment, training and development programs and access to opportunities		

Percentage of local procurement* spend by project and location:

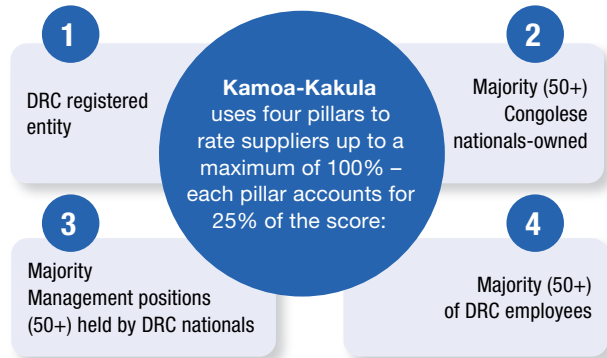


* In-country spend in our countries of operation.

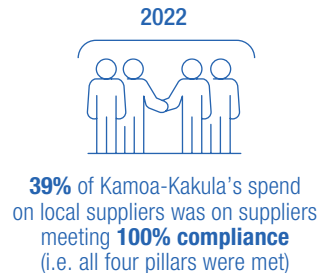
DRC projects: Kamo-a-Kakula and Kipushi

At Kamo-a-Kakula and Kipushi, our local procurement strategy is guided by the applicable DRC regulatory framework.

Kamo-a-Kakula and Kipushi are updating and aligning their local procurement requirements in accordance with the relevant provisions of the amended DRC mining code.



Suppliers meeting the requirements for all four pillars are classified as 100% compliant. Based on the above pillars, the spend analysis for qualifying local suppliers is as follows:



Kamo-a-Kakula's local procurement strategy, launched in 2021, aims to form relationships with local suppliers to boost the economy, as well as to offer opportunities for business development and training, and is built on three elements:

- Local supplier preference** – a local procurement committee to drive Kamo-a-Kakula's strategy and set the criteria for suppliers, as well as establish a scoring system and preferential payment terms.
- Local supplier access** – all systems are in place to make the application process easy and accessible for local suppliers and to provide a platform for training and ongoing communication.
- Local supplier development** – suppliers will be supported and guided through the tender process; and workshops will be held to address any difficulties or concerns.

At **Kipushi**, suppliers are also categorized by geographical location:

- Local** – suppliers registered as domiciled in Kipushi and surrounding areas reporting under the Kipushi territory
- National** – suppliers registered within DRC but not in the Kipushi territory
- Foreign** – all other suppliers who are not DRC registered entities but are part of the Kipushi supplier address book

South African project: Platreef

The procurement strategy at our South African project, Platreef, is guided by the South African Mining Charter and the Department of Trade, Industry and Competition's (DTIC) B-BBEE Codes of Good Practice.

The **Platreef Project** has expanded the mine's SLP components by creating focused awareness for contractors and suppliers to locally source and procure.

Suppliers are categorized in terms of their ownership as defined in the Mining Charter and B-BBEE scorecard: black-owned; women-owned, youth-owned; and people living with disabilities. Preference is afforded to suppliers within these categories.

In 2022, Mining Charter compliance with local procurement requirements was as follows:

Mining Services procurement spend analysis		
Description	Target	% achieved
Local-owned business	80%	96%
HDSA-owned	50%	78%
Women-owned*	15%	10%
Youth-owned**	5%	1%
B-BBEE compliant	10%	84%

* Based on 50% ownership.

** Youth-owned is based on more than 50% ownership.

Mining Goods procurement spend analysis		
Description	Target	% achieved
Local-owned business	70%	98%
HDSA-owned	21%	25%
Women- and youth-owned*	5%	16%
B-BBEE compliant	44%	81%

* Women- and youth-owned is based on a combined ownership of more than 50%.



Enterprise and supplier development training, the Business Accelerator Program, for local entrepreneurs around the Platreef Project.

The **Platreef Project's** suppliers are categorized by seven geographical locations:



MATERIAL TOPIC

Transformative innovation through enterprise and supplier development

The success of entrepreneurs and small businesses is critical to the growth of local economies, job creation and innovation, making it imperative that we support them throughout our supply chain.

We have a critical role to play in the creation of diversified and inclusive entrepreneurial innovation by supporting their development and growth through the provision of skills training, mentorship, opportunities to scale and access to needed resources (like digital tools, financing and other critical inputs). We prioritize our ESD programs and seek to create opportunities for community suppliers to benefit from skills transfer and sustainable wealth generation. The aim of our strategy is to form relationships with local suppliers, offering development and training for their businesses. Among others, our ESD programs comprise one-on-one support, in the form of capital and time, contextualized for different groups and sizes of suppliers and their individual needs, to fast track their graduation into our supply chain and enable their growth into self-sustaining market players. We're committed to working according to fair market principles, and to providing growth-focused support.

Kamoa-Kakula's 2022 ESD initiatives



Enterprise and supplier training

- orders and tender management
- women in mining apprenticeship program
- partnership and relationship management
- good practice
- the implication of entering into business with Kamoa-Kakula in terms of deliveries
- supplier portal registration
- mentorships



Support

- digital supplier portal
- review of the business model for the gardening enterprise program, making the community business operationally autonomous and efficient
- landscaping enterprise business program under review to provide a new operating model which will enhance business efficiency and growth

Highlights



100 interventions

7 informal enterprises supported

41 formal enterprises supported

8 ring-fenced opportunities for local community suppliers



Construction of the facility for the Muvunda Poultry Project by Kalubi Jeanmarie, a general worker, employed by local contractor, EMS.

Special Report

Local Suppliers and Enterprises boom in 2022



[Video link](#)

Ndizi Salama

In 2022, Kamo-Kakula's livelihoods banana plantation, an initiative to support female entrepreneurship, went into production. The women named their enterprise "Ndizi Salama". Currently, 26 women from local communities are full-time owner-workers at these plantations, spanning 11 hectares. They have provided more than four tons of bananas to Kamo-Kakula and aim to expand their customer database.



[Video link](#)

Mundjendje Poultry Farm

In 2016, a group of 10 women from the Mundjendje community were trained for broiler production by Kamo-Kakula's Sustainable Livelihoods Program, as well as by external consultants from the Kolwezi veterinary department, commencing operations with 1,000 broiler chicks. Since then, Kamo-Kakula has supported these women to establish a government-certified solar-powered abattoir, and an additional poultry house – hosting 2,500 layers – that could be used specifically for egg production. In 2022, the Mundjendje Poultry Association produced 188,685 eggs and earned revenue of \$30,189, elevating the entity to a company, now named Lwansenga Poultry SARL.



[Video link](#)

Tujenge Cooperative

The Tujenge (meaning "let's build") Cooperative, comprised of 19 owner-employees, has been supplying Kamo-Kakula with bricks since 2018. In 2022, Kamo-Kakula assisted Tujenge to obtain a second brick-making machine, enabling them to increase production and produce different types of bricks in future. Kamo-Kakula has supported the cooperative in acquiring brick making machines and training community members to make bricks, prepare quotes and invoices, and run their own business. This ESD program has supported local community members by enabling them to earn a salary and a share of the profits, as well as generate employment for 17 general workers, with the aim of adding 20 new workers to the team.



[Video link](#)

Mwaiseni Restaurant

A new restaurant, owned and managed by nine community members, has been established in the Kakula truck park. With an average capacity of about 1,200 trucks at any given time, more than 2,000 truck drivers are on stand-by until their truck is loaded and ready to leave, providing a major niche market for the Mwaiseni business that operates a restaurant and a shop. Named Mwaiseni, which means "welcome" in Swahili, the drivers can enjoy a fresh beverage and warm meal at an affordable price, while enjoying a soccer match on the wall mounted dual-screens in the entertainment space.



[Video link](#)

Kakula Car Wash

A new strategically located car wash launched in January 2023 at the Kakula truck parking, offering its services to Kamo-Kakula's fleet of more than 200 light vehicles, as well as other vehicles of varying sizes operating around Kamo-Kakula. The Mukanga Consulting Group, an existing community business with experience in the car wash business, will operate the business, thereby expediting the launch of the business.



Local suppliers completing the attendance register for supplier training at the Platreef Project.



Local supplier training and networking session held at the Platreef Project.

Platreef's 2022 ESD initiatives



Enterprise and supplier training

- Business Accelerator Program
- Business training
- Educating suppliers on Platreef's processes and requirements
- Accessing procurement opportunities
- Business sustainability and growth
- Mentoring and coaching
- Alignment to SLP, LRP, B-BBEE Codes, Mining Charter, and business-wide transformation initiatives



Support

- Assistance in the form of equipment and three-year business development contracts to establish three on-site food kiosks, operated by local service providers (two of which are female-owned) from the Tshamahansi, Ga-Kgobudi and Ga-Magongoa communities
- In partnership with personal protective equipment (PPE) supplier, Pienaar Brothers, a franchise agreement was concluded with a local female-owned Mokopane based entrepreneur, awarding her a five-year site-based PPE supply contract
- Expansion of the community-owned laundry initiative, established in 2015, comprised of six shareholders (mostly women and youth), employing 20 local community members
- A temporary cyber center was provided for on-site local suppliers

Highlights



270
enterprises in training interventions

14
suppliers in training interventions

17
enterprises graduated to Platreef's supply chain

23
suppliers in mentorships programs

25
loans granted creating **225 jobs**

Plans for an **integrated business hub** to be launched in 2023



[Video link](#)

Special Report

Kushona Sewing Centre

The Kushona Sewing Centre, initiated by Ivanhoe in 2018, has an annual intake of 50 students, accommodating two levels of sewing – beginner and advanced. This initiative has had an important impact on the community, as clothes made at the centre are sponsored to vulnerable groups such as the orphanages, prisons and people living with disabilities. Throughout the COVID-19 pandemic, Kushona supplied 200 cloth masks per month to Kipushi residents. Ivanhoe provides ongoing support to Kushona through the provision of materials, equipment, and trainer salaries.

Community and social vitality

Broad-based black economic empowerment at our Platreef Project

In conformance with South Africa's mining laws and in fulfilment of the requirement of the Company's mining right, the ownership structure at the Platreef Project includes a 26% interest transferred to a B-BBEE special purpose vehicle, comprised of 3% local non-managerial employees, 3% local entrepreneurs (as well as a limited number of managerial employees), and 20% in a trust established for the benefit of the 20 communities that surround the Platreef Project area (Bonega Communities Trust). Until a dividend is declared, Ivanhoe has committed to contributing an amount of ~\$598,000 (R11 million) per annum to the Bonega Communities Trust for the implementation of public-benefit initiatives.



[Video link](#)

Special Report

Mokopane Youth Waste Project

A widespread poverty alleviation campaign project was initiated in partnership with the Impact Catalyst and the Bonega Communities Trust, and Ivanplats' broad-based black economic empowerment vehicle, through which 500 youth were employed for community waste collection and promoting environmental awareness.

In 2022, the Bonega Communities Trust held a series of engagements with local community leaders to consider several community benefit projects, initially targeting the three directly affected communities – Ga-Kgobudi, Ga-Magongoa and Tshamahansi – for implementation in 2023. Ivanhoe contributes technical and administrative support to ensure the successful implementation of these initiatives.

Community development, infrastructure and support

Ivanhoe Mines is committed to contribute towards the long-term viability and well-being of our host communities. Through maintaining positive, transparent and collaborative relationships with our local communities, we strive to create shared value, making a difference in their everyday lives.

Stakeholder needs and expectations have shifted drastically over the past decade, requiring us to proactively take action in building trust, obtaining and maintaining social acceptance, honouring our social licences to operate, and collaborating on ways to deliver socio-economic benefits to these communities. We strongly believe that partnering with these communities and our key stakeholders, as well as collaborating with our peers, will enable us to find sustainable solutions to pertinent socio-economic challenges.

Acting in a socially responsible manner and delivering on sustainable development objectives requires companies to go beyond acceptability and work in partnership with others to leave behind a positive legacy for host communities. Acknowledging and addressing community concerns and grievances forms part of our main objectives to mitigate adverse impacts to our operations, industry as a whole and importantly, our host communities. Stakeholder engagement and grievance management was identified as a material matter in 2022. In acknowledging and addressing this, we have strengthened our internal policies, procedures and practices to maintain high standards in stakeholder management, handling of grievances (see page 30), accountability and transparency, and socio-economic development project design and delivery.

Our Group Sustainability Strategy includes our goals and targets for social development, and aligns our social projects with country regulatory frameworks and international frameworks, such as the SDGs. We are setting annual targets while working towards the medium- and long-term goals determined by the plans for community development, namely the Cahier des Charges in the DRC and the SLP in South Africa (each of which are valid for five years at a time), and our priority SDGs. We are working towards the development of comprehensive monitoring programs for our community development initiatives. Currently, progress on these initiatives is discussed with executive management at our monthly review meetings.

Ivanhoe Mines has made significant contributions to community infrastructure in the pursuit of creating functional and prosperous local economies. The long-term sustainability of our community development projects is critical, and we work towards the hand-over, longevity and independence of projects from the start. We achieve this by identifying and appointing local champions in projects, supporting existing community-led initiatives and increasing partnerships in our work. We also strive to ensure that the infrastructure of these projects is maintained and kept in good condition, and in the case of water infrastructure that potable water is routinely tested.

Kamoa-Kakula's community development, infrastructure, and support initiatives continued to focus on promoting local food security and providing access to potable water, as well as establishing and equipping much needed health facilities.

The Sustainable Livelihoods Program, founded by Ivanhoe Mines in 2010 to strengthen food security and farming capacity in the host communities near the project, includes maize, vegetable- and fruit production; aquaculture; poultry; and honey. In 2022, the construction of 89 additional ponds was completed, bringing the total to 225 fishponds. The existing generator operated water pump was replaced by a canal feeding into the fishponds with water. In 2022, an aquaculture project was also launched at Mupenda, and the Muvunda Poultry Project was constructed in a record time of three months and is already functioning at full capacity.

Maize

28 communities
383 beneficiaries
292 hectares
582,928 kg produced
\$291,465 earned



Vegetables and fruit

17 communities
116 beneficiaries
721,410 kg produced
\$1,143,066 earned



Poultry

2 communities
29 beneficiaries
251,233 eggs produced
\$40,197 earned



Micheal Kayinda, General Worker; Paul Kabengele, Superintendent Community Projects; Yves Kabuya, Tractor Operator; and Maloba Kamana, General Worker, standing behind 17hp diesel-powered, walk-behind micro tractors, which were procured to aid the women in tending to operations of the 11 hectares of the banana plantation.

Fish

8 communities
44 beneficiaries
24,741 kg produced
\$86,594 earned



Honey

1 community
3 beneficiaries
760 kg produced
\$10,200 earned



Bananas

11 hectares
5 communities
26 beneficiaries
4,000 kg produced
\$10,144 earned



Special Report

Special Report Case Study at Kamoa-Kakula

Context setting

This case study focused on four projects run under the Kamoa Sustainable Livelihoods Program which is in the Lualaba Province of the Democratic Republic of Congo.

This initiative is designed to provide access to food and economic activity for communities in the Kamoa region. They have been a major focus of the Kamoa-Kakula social development initiatives to increase quality of life of local stakeholders, improve food security in the region and build self-sustaining communities.

Kamoa-Kakula has been involved in community livelihoods through the investment of financial capital, material and training of communities in maize and vegetable growing, poultry production, beekeeping and aquaculture, as well as business management and marketing. These projects have provided beneficiaries access to markets, where they are able to sell their yields and make an income.



The Kamoa-Kakula Copper Complex

Kamoa-Kakula is located near the mining hub of Kolwezi in the Lualaba Province.

Community members in the **42 areas** of influence identified by Kamoa

Businesses and residents in the nearest metro area Kolwezi. The population in Kolwezi in 2022 was 511,000, a 2% increase from 2021.

Maize Farming and Vegetable Garden

This project was established in 2011 as one of the first projects under the program. Its key focus is on improving food security in the Kamoa region, as well as improving the living standards of maize and vegetable farmers in the communities by providing sufficient quality produce on the market. To date, this project has become the biggest contributor to the program.

Poultry

The poultry production and management has been running for seven years and was established with the key objective of improving the nutritional status and income of households. The project has mainly been focused around marginalized women within the communities.

Beekeeping

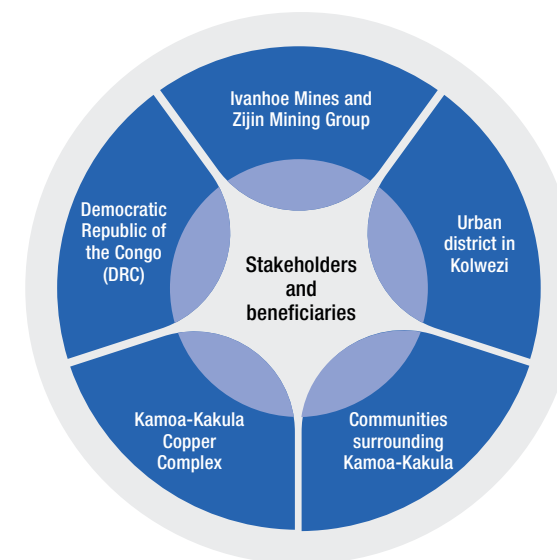
The honey production project was established in 2014 with the objective of supporting local beekeepers by generating income from the sale of honey and beeswax produced. Kamoa-Kakula is the largest consumer of organic honey produced by these communities. Males living in the Kamoa communities have mainly been involved.

Aquaculture

Kamoa-Kakula developed an aquaculture project in the communities aimed at developing both farming and business management skills, improving food security and increasing the nutritional and economic contribution of the communities. This livelihood project is five years old (est. 2018) and is showing consistent growth, evidenced by the increase in number of number of participants year on year.

Kamoa-Kakula has been involved in community livelihoods through the investment of financial capital, material and training of communities in maize and vegetable growing, poultry production,

beekeeping and aquaculture, as well as business management and marketing. These projects have provided beneficiaries access-to markets, where they are able to sell their yields and make an income. Some of the community members are involved in different projects, enabling them to have multiple streams of income whereas previously the main source of income for community members was subsistence farming. The case study covers how the livelihoods projects have made an impact on all the beneficiaries. The case study is informed by the data and reports collected by the Kamoa-Kakula team as part of their measurement and monitoring programme. The selected projects had data which spanned over a minimum of five years.



Summary theories of change: Kamoja Livelihoods Projects

Inputs

TOTAL CAPITAL (CAPEX) INVESTED ACROSS FOUR PROJECTS:

- **\$2,797,694** for the development of infrastructure and provision of inputs

TOTAL OPERATING EXPENDITURE (OPEX) ACROSS FOUR PROJECTS:

- **\$1,338,160**
- An additional financial investment of **\$324,680** was provided across the four projects towards training the projects' beneficiaries

Outputs*

- A combined total of **322 hectares** of land farmed to produce **3,607 tons** of maize and **1,650 tons** of vegetables
- Construction of **two** poultry houses, **one** abattoir and layers house
- Over **640,000 eggs** and **8.7 tons** of chicken meat produced from the poultry management project
- **100 hives** constructed, producing over **5 tons** of honey since project inception
- **225 fish ponds** and **one fish hatchery** constructed to produce over **28 tons** of fish, mainly tilapia
- Over **\$4.2 million** of revenue generated across the four projects from the sale of produce, translating to farmers being supported with salaries ranging between **\$200** (farmer follower) to **\$3,500** (lead farmer)
- Delivery of **2,264 hours** of training to farmers on maize and vegetable farming, sustainable poultry and honey production, aquaculture; and business management and marketing

* Outputs reported based on project operational period, see details in slide overleaf.

Outcomes

ENHANCED LIVELIHOODS

- Improved livelihoods for ~ **797 persons**, with the ability to expand income through vegetable, maize, poultry and fish farming as well as beekeeping
- Increased economic productivity within and beyond involved communities through job creation

HEALTH AND WELL-BEING

- Improved nutrition supporting better health and well-being of **4,384 beneficiaries**
- Improved food security for farmers and their families (~ 4 384 persons) due to having better access to and availability of food from **farming and production**

HUMAN CAPITAL

- Enhanced skill set of **797 beneficiaries** through training received and skills transfer

Average monthly salaries

Maize and vegetable farmer

3 500 (lead)
\$200 (follower)

Aquaculture farmer

\$200

Poultry farmer

\$250 – \$350



Beneficiaries of the Kamoja-Kakula vegetable farming initiative.

Inputs

CAPITAL INVESTMENT

Maize Farming and Vegetables: \$1,088,037

- Provision of maize farming materials including: fertilizer, urea, maize seeds and organic pesticides for the maize farming
- Provision of farming materials including vegetable tunnels, seeds and garden equipment for the vegetable garden
- Provision of tractors to farmers on a leased arrangement

Poultry: \$464,995

- Development of infrastructure and provision of inputs

Beekeeping: \$63,655

- Development of infrastructure and provision of inputs

Aquaculture: \$1,181,008

- Construction of fishponds and purchasing of fish (i.e. tilapia)
- Fish hatchery infrastructure and equipment

OPERATING EXPENDITURE

Maize Farming and Vegetables: \$499,901

- An investment of \$78,400 provided towards training the project beneficiaries

Poultry: \$232,815

- Project materials for operation including chicks, seeds, drinkers, feeders, a tank, pipes, solar panels, inverters, batteries, regulators, bulbs, abattoir equipment, fridges and personal protective equipment (PPE)
- An investment of \$78,240 provided towards training the project beneficiaries

Beekeeping: \$29,475, inclusive of \$500 to maintain hives every five years

- Beekeeping materials
- An investment of \$5,120 towards training project beneficiaries

Aquaculture: \$575,969, inclusive of \$100 each month for the purchase of fish feed

- An investment of \$162,920 for training project beneficiaries

Outputs



Maize Farming and Vegetables:

- A total of **292 Hectares** of land farmed to produce **3,607 tons** of maize
- A total of **30 Hectares** of land farmed to produce **1,650 tons** of vegetables
- Over **\$1.8 million** generated from maize sales and over **\$2 million** generated from vegetable sales
- **Vegetable and maize farmers** supported with a salary of **\$400** (farmer follower) and **\$3,500** (lead farmer) per month from the project
- Delivery of **980 hours** of training to **39 communities** in maize and vegetable production as well as business management and marketing.



Poultry:

- **57 beneficiaries** provided with two poultry houses, one abattoir and one layers house to support the production of poultry, **55** of them being **marginalized women**
- Over **640,000** eggs produced
- Over **8.5 tons** of broiler chicken meat produced
- **\$143,140** of revenue generated from the sale of eggs and chicken, resulting in poultry farmers being supported with a salary of between **\$250-\$350** per month
- Delivery of **1,104 hours** of training to **three communities** in sustainable poultry production and management as well as broiler chicken marketing.
- **Two** small businesses developed in two communities with a total population of **2,685 individuals**



Beekeeping:

- **100 hives** constructed since project inception
- Approximately **5 tons** of honey produced
- Over **\$37,000** generated as revenue from the sale of honey
- Delivery of **40 hours** of training to **two communities** in sustainable organic honey production, processing, packaging and marketing, as well as the management of beehives and operation over five years.



Aquaculture:

- Construction of **225 fishponds**
- Construction of **one fish hatchery**
- Purchased fish that was used to commence farming
- **28 tons** of fish produced
- **\$105,167** generated from fish sales, resulting in farmers being supported with an average salary of **\$200** per month
- Delivery of **140 hours** of training to **seven communities** on aquaculture
- Consistent availability of food supply, as farmers retain 20% of yield.

Outcomes

ENHANCED LIVELIHOODS

Beneficiaries of improved livelihoods with the ability to expand income through these initiatives and increased economic productivity within and beyond involved communities through job creation:

- **Maize and farming vegetables: 532**
- **Poultry: 57**
- **Beekeeping: 20**
- **Aquaculture: 188**

HEALTH AND WELL-BEING

Beneficiaries of improved nutrition supporting better health and well-being and improved food security for farmers and their families due to having better access to, and availability of, food from farming:

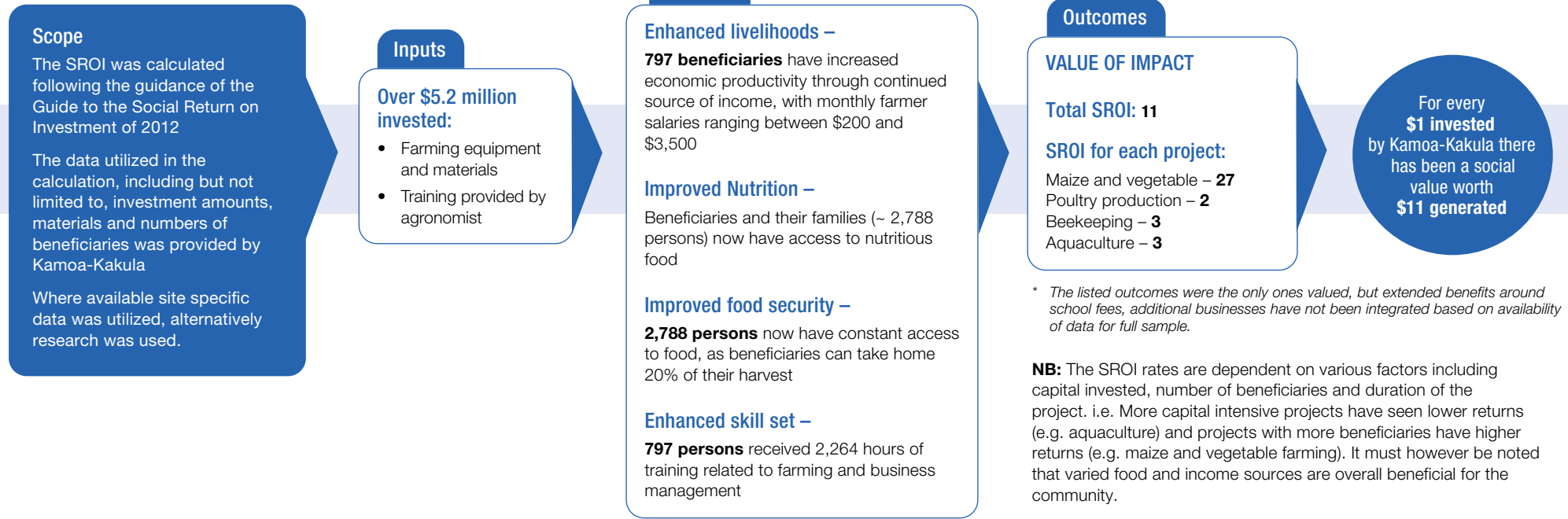
- **Maize and farming vegetables: 2,926**
- **Poultry: 314**
- **Beekeeping: 110**
- **Aquaculture: 1,034**

HUMAN CAPITAL

Beneficiaries of enhanced skillset through training received and skills transfer, especially for women in the communities:

- **Maize and farming vegetables: 532**
- **Poultry: 57**
- **Beekeeping: 20**
- **Aquaculture: 188**

Social return on investment (SROI)



Quarterly engagement session held with the lead farmers participating in Kamo-Kakula's sustainable livelihoods program.

Community infrastructure initiatives undertaken by **Kamoa-Kakula** include water, health, recreational, and ecclesiastical infrastructure. Additional solar-powered boreholes were installed in host communities, making potable water more easily accessible. Health initiatives included the construction, equipping and hand-over of the Muvunda Clinic and the commencement of construction for two additional rural community health centres. A community soccer field and church were constructed in Kaponda. The construction of a church for the Tshilongo Village has commenced.

At our **Platreef Project**, we have ensured compliance with the regulatory requirements of the SLP and the B-BBEE codes of best practice, as well as sought to address specific community needs as they arise. Community support initiatives undertaken by Ivanhoe at our Platreef Project include: the donation of an office container and furniture to Mokopane Traditional Council; the sponsorship and participation in the annual Mogalakwena Local Municipality Mayoral race event aimed at promoting healthy living in the communities, and the donation of gardening tools and seedlings to the Baphulgile drop-in center at Ga-Magongoa, with a view to improving food security by re-establishing food gardens in the communities.

Ivanhoe's efforts towards community infrastructure support in 2022 included ongoing maintenance of the Wi-Fi hotspots installed by Ivanhoe within the local communities surrounding the Platreef Project, as well as the refurbishment of the boreholes in the Ga-Magongoa community. Ivanhoe also supported the construction of two rainwater harvesting facilities at two households within the Ga-Kgobudi community. Platreef, in collaboration with our contractor DRA Global, also commenced construction of a sports field in the Tshamahansi community. This initiative further expanded the community's access to recreational facilities.

At the **Kipushi Project**, Ivanhoe continued to invest in the town's water infrastructure through maintenance of the pumping station, pumping 1,000 cubic meters of potable water continuously to Kipushi residents daily, as well as the installation of solar-powered water wells. In 2018, Ivanhoe commenced a long-term project aiming to install 50 solar-powered potable water wells in villages near the Kipushi Project. These boreholes are maintained by the water committee with the support of Ivanhoe and the local Health Zone. In 2022, ten additional water wells were drilled, bringing the total to 22. Ivanhoe continues to work alongside the Health Zone in Kipushi to identify hotspots for future installations, with ten more water wells planned for 2023. The identification process considers the security of the equipment by strategically placing the boreholes in organized premises or private property that is safeguarded. Weekly monitoring is conducted to test the water quality. Throughout 2022, Kipushi also supported an orphanage with school uniforms, notebooks and clothes made by the Kushona Sewing Project.



Beneficiaries of Platreef's scholarship program.



[Video link](#)

Special Report

Enhancing health and well-being for Mrs. Mbombo

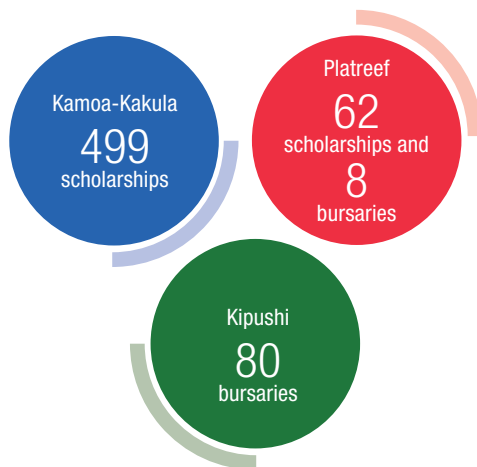
Mrs. Mbombo from the Kipushi Community has made use of prosthetics for the past 43 years after sustaining a severe injury to her leg in a car accident which resulted in amputation. She formed part of the beading group, an initiative previously hosted by Kipushi, and had to trek to classes with her burdensome prosthetics. Though she struggled, she never gave up and showed incredible endurance, striving to be an exemplary student of the Kushona Centre. In 2022, when Mrs. Mbombo wrote to Ivanhoe requesting assistance in obtaining better prosthetics, Ivanhoe collaborated with the Wote PamoJa Centre to heed her life-altering request.

Educational infrastructure and support

Education not only unlocks opportunities for personal development and well-being, but it also affects our ability to hire labour from the local communities and grow the future economy in the regions where we operate. **It is thus a business imperative for us to drive Ivanhoe Mines' commitment to SDG 4: Quality Education.** Pursuant to our vision, we aspire to be a catalyst for access to educational opportunities, across all ages, and to collaborate with partners to ensure access to quality education.

Ivanhoe will invest in the growth of skills, and literacy levels in the areas in which we operate. We will also invest in the improvement of the quality of education through all stages of progression, including early childhood development, schooling, tertiary education, work readiness and career advancement. In 2022, Ivanhoe continued to support dedicated educational projects through the construction of educational facilities, renovation of educational facilities, provision of access of running water at education facilities, and educational support and enrichment programs (such as scholarships, bursaries, internships, learnerships, and donations).

Ivanhoe's educational support initiatives, 2022



In 2022, Kamo-a-Kakula constructed and handed over the Muvunda and Cite Musoka Early Childhood Development (ECD) centres to the community. These facilities are the very first of their kind in the region, constructed to meet the communities' need for an ECD facility for their younger children, thereby affording mothers the opportunity to pursue an occupation while the children are cared for in a safe, nurturing environment. The new schools have been fitted with canteens and have two classrooms, that can host up to 40 schoolchildren, limiting the initial intake to 80 children. Each class has one teacher and one teaching assistant.

In the short time that Muvunda Primary has been in operation, the school almost doubled in size from 182 students in 2021 to 347 students in 2022. These students, aged between six and 14 years old, are taught Mathematics, Sciences and French (reading and grammar) as main subjects. 214 Girls and 114 boys attended. Over the past year there has already been promising progress from the learners and although the challenge has arisen to limit classrooms to less than 55 students, by recommendation from UNESCO, Kamo-a-Kakula will continue to invest in the school and its learners, ensuring that the next generation can build their future through education.

Additionally, Kamo-a provided support to the Kaponda Primary school by supplying the school with wooden desks and office supplies. Other support included purchasing teaching material for two schools in the region and equipping the Musokantanda laboratory to enhance students' learning experience.

Additional infrastructure includes the provision of a tertiary education facility set to launch in 2023.



Thuli Motsitsi, Office Manager and Project Coordinator, Ivanhoe Mines, presenting information about the Kamo-a-Kakula Copper Complex to high school students near Kamo-a-Kakula.

Special Report

Building a nation on a foundation of excellence

Earthworks for the construction of a world-class tertiary education facility to serve the mining hub of Kolwezi and the communities surrounding the Kamo-a-Kakula Copper Complex – The Kamo-a Centre of Excellence – have commenced, with the official launch of the centre expected for the Q4 2023. Situated on the outskirts of Kolwezi, this facility will provide an environment to educate multiple generations in the future. The Kamo-a Centre of Excellence will be a future-ready facility hosted within an adaptable campus.

This project will take place over multiple phases to allow for departments, as well as sports facilities, to be added over time. The Kamo-a Centre of Excellence will have its maiden student intake in September 2023, offering a one-year ready-for-work program

in partnership with the Enterprises University of Pretoria (South Africa). The initial intake will accommodate between 30 to 40 Congolese students, funded by a bursary from Kamo-a-Kakula. The curriculum will be hosted by the Enterprises University of Pretoria and will follow a blended learning model, incorporating “online/virtual” sessions delivered on campus and intermittent, face-to-face interaction via Enterprises University of Pretoria lecturers travelling to the Kamo-a Centre of Excellence. The curriculum offering will be aligned with the requirements of the mining industry, including courses such as engineering, French-English language courses, and customized ready for work programs.





Donation of furniture to the Kgatabela Primary School in the Ga-Madiba Community near the Platreef Project.



Prince Malatji, Winder Technician, a local beneficiary of Ivanhoe's learnership program, now employed at Platreef.



Donation of an office container to the Mokopane Traditional Council near the Platreef Project.

During 2022, Platreef focused their educational support efforts on several donations to schools within the local community. Donation of a science laboratory to Somavugha Secondary School in Tshamahansi was made in partnership with Platreef's contractor, Epiroc. The school has an enrolment of approximately 950 learners with an average high school graduation rate of 70%. Another donation to this school included 15 computers and a server. Refurbishment of the computer laboratory is in progress to accommodate 25 learners per session. Donations of office furniture were also made to five other local schools. Other educational support initiatives included an artisan learnership program, in collaboration with Murray & Roberts Training Academy, benefitting 11 community learners. An initiative showcasing fourth industrial revolution (4IR) technology, hosted in collaboration with other partners also benefitted 390 students from five local communities near Platreef.

At Kipushi, support was given to the Mulumba Lukoji school by fixing their damaged transformer that feeds the school with electrical power. Further support was given to the Mungoti School by supplying desks to the school.



[Video link](#)

Special Report

Enabling global opportunities through education

Ivanhoe started its bursary program for Kipushi in 2018. Bursaries are offered to Kipushi residents to pursue tertiary education, provided they achieve a 75% high school graduation mark. Throughout the past five years Ivanhoe has assisted several students in pursuing studies in Geology, Engineering, Economics, Medicine, Agriculture, and Communication.

Infrastructure for sustainable cities and communities of the future

Bulk power for the Kamo-a-Kakula Copper Complex

Like the existing Phase 1 and Phase 2 operations, future expansions of the Kamo-a-Kakula Copper Complex will be powered by clean, renewable hydro-generated electricity which is developed in partnership with the DRC's state-owned power company, SNEL.

Power generation and transmission

Ivanhoe Mines appreciates the need for companies working in emerging economies to contribute towards infrastructure development. Our commitment to the SDGs focuses on developing quality, reliable, sustainable, and resilient infrastructure, not only in our host communities but also at a regional and trans-border level.

We deliver infrastructure projects relating to electricity and roads and we are also investigating the viability of other bulk access infrastructure options, such as trans-border rail options. These projects are always considered from the perspective or possibility of fostering productive public-private partnerships in our host countries, in recognizing that bulk infrastructure is vital to a country's economic development and prosperity. Developing mining projects in emerging economies poses a unique set of challenges, such as ensuring access to crucial infrastructure. However, Ivanhoe Mines has not only positioned itself as a leader in public-private partnerships for bulk- and access infrastructure development in Africa, but also demonstrated a proven track-record as successful implementer thereof.

Inga II G25 hydropower plant refurbishment and upgrade

Ivanhoe Mines is a key partner in an initiative focusing on collaboratively upgrading work at the Inga II G25 Hydro Power Plant in the DRC. In August 2021, Ivanhoe signed an extension of the existing financing agreement with SNEL to upgrade turbine 5 at the Inga II hydropower complex. The Inga II hydropower plant is in the southwest of the DRC, on the Congo River. The Congo River is the deepest river in the world and the second longest after the Nile, with a flow rate second only to the Amazon River. Measured along the Lualaba, the main tributary, the Congo River has a total length of 4,370 kilometres. It is the only major river to cross the equator twice. The Congo River is unique in that it has large rapids and waterfalls very close to the mouth, while most rivers have these features upstream. The rapids and waterfalls give the Congo River huge hydropower potential. The Congo Basin covers an estimated total area of 3.7 million square kilometres, approximately 13% of the entire African landmass.

Originally equipped between 1977 and 1982, Inga II has been running for approximately 40 years. Four of the eight turbines at Inga II have been refurbished. Turbine 5 is one of the remaining four turbines that is now being upgraded. An estimated output of 178 MW is expected to be unlocked by upgrading Inga II's turbine 5, part of which will be used to meet future power requirements of the Kamo-a-Kakula Copper Complex. The surplus power produced from the upgraded turbine will be distributed on the national power grid to increase access to electricity for the citizens of the DRC.

SNEL and Ivanhoe Mines Energy DRC SARL have appointed Gruner Stucky of Lausanne, Switzerland as the engineering firm, and Voith Hydro, a leading engineering group, as the contractor to lead the consortium of equipment manufacturers for the turbine upgrade. Voith has successfully rehabilitated two turbine generators at the adjoining Inga I hydropower plant, a project that was financed by the World Bank. DRA was appointed by Ivanhoe Mines team to provide Project Management and Project Controls support. Turbine 5 is expected to produce 178 MW of renewable hydropower, providing the Kamo-a-Kakula Copper Complex and the planned, associated smelter with abundant, sustainable electricity for future expansions.



Inga II Hydro Electrical Power Station turbine refurbishment.

Inga and Kolwezi converter station

The related Inga II G25 and Kolwezi convertor yards and its associated equipment will be assessed for further upgrades to include a reactive filter system that will assist with the stability of the power grid to reliably transmit power onto the HVDC overhead line (OHL) to Kolwezi region.

HVDC OHL

New terminating structures from Inga II's G25 convertor station to the destination at SNEL's Kolwezi convertor station will be installed to ensure an increased life of the OHL. This is to include all towers, poles, insulators, surge arrestors and relevant communication.

Bulk power for the Platreef Project

At our Platreef Project, the 8MVA power supply for the on-going development of the Platreef Project was successfully upgraded and is fully operational with a stable supply. Work commenced on two 100MVA power lines, which will supply the mine with an uninterrupted premium supply of electricity. Currently 11 kilometers of the 27-kilometer line has been erected. Environmental and social challenges arose pursuant to encroachment on the servitude earmarked for the powerline, thereby affecting the approval of the ESIA. Approval on the ESIA was obtained in the first quarter of 2023, with completion of the powerline still forecast on time. Work also commenced on the 33 KVA Eskom yard, with the terrace construction and earth matt completed.

In pursuit of our decarbonization agenda, Ivanhoe also commenced with construction procurement for a 5MVA solar power facility. All support structures, panels and the inverter were procured with delivery expected in the first half of 2023. Ivanhoe is currently exploring various options to increase the alternative power solutions for the Project.



33 KVA Eskom yard.



[Video link](#)

Special Report

Local supplier joins Ivanplats on net zero journey

Taking a step towards decarbonization, construction procurement in respect of Platreef's first solar-power plant commenced in 2022. The foundational frames for the solar panels required for photovoltaic solar energy conversion have been procured from a local supplier, thereby also advancing Ivanhoe's vision for shared value. Construction and commissioning of the solar-power plant is expected in 2023.

MATERIAL TOPIC

Economic and physical displacement, and livelihood restoration

Land access, displacement, and resettlement (LADAR) was identified as a material topic in Ivanhoe's 2022 materiality assessment.

Ivanhoe Mines is committed to upholding the best practice principles for resettlement and economic displacement, primarily these outlined in the IFC's Performance Standards. We are engaged in resettlement and/or livelihood restoration projects at both our Kamo-Kakula and Platreef Projects, which are at different phases of completion.

Kamo-Kakula Copper Complex

In 2017, Kamo-Kakula's requirement for operational surface areas triggered a multi-phased Resettlement Action Plan (RAP). The process commenced through surveys required to establish a baseline, and identify and register all project-affected persons (PAPs) and their assets. The RAP established the basis for the agreement with the PAPs, with the purpose of specifying all resettlement arrangements and measures for avoiding, minimizing or compensating losses or other negative social impacts resulting from resettlement.

After conducting surveys for newly identified PAPs in 2020 and reaching agreement for resettlement, a compensation framework for economic displacement and compensation for loss of access to communal assets was established. In 2021, we commenced the construction of resettlement houses for the relocation program. In 2022, six resettlements for phased relocation were completed. To date, 162 households have been relocated, replacing their straw-hut hamlet structures with stronger, more spacious houses of a much higher quality, constructed from pre-cast concrete, hollow cement blocks, roof sheeting and steel frames. All PAPs are provided with maize, cassava, fruit trees and vegetables for planting.



Handover of citrus trees to residents at Kaponda, as part of Kamo-Kakula's relocation program. Mapindji Kabwita Gracia, Livelihoods Worker, handing over trees to Mutoka Stanley, community member.

Communal infrastructure established as part of Kamo's RAP, 2022



Muvunda Clinic

Completed in June 2022

Handed over to the Kanzenze Health Zone

48 bed capacity, four neo-natal cradles

Energy and laundry facilities



Kaponda Pentecostal Church

Opening ceremony in April 2022

Seating capacity 500 people

Multi purpose for community meetings

\$188,000 investment

Musical and audio equipment sponsored



Kaponda Soccer Pitch

Opening ceremony in June 2022

Multi-purpose athletic track

1,400 beneficiaries

\$71,978 investment

Uniform and equipment sponsored

Platreef Project

Platreef continued to engage with the three communities of Ga-Kgobudi, Ga-Magongoa and Tshamahansi on the Livelihood Restoration Plan (LRP). Engagements in 2022 focused on the once off compensation for mieliefields for the communities of Tshamahansi and Ga-Magongoa and grazing land replacement for the three communities. In 2021, Ivanhoe proposed the "logic model" for livelihood compensation, determined by two approaches – a production value approach for loss of crop fields and a valuation-based approach, based on market prices for loss of grazing land. The communities challenged this model since previous compensation received by the land rights users set a precedence, which established an expectation, even a type of "principal value". A significant amount of time and effort was spent with the communities and their legal representatives to explain the proposed compensation value, which was eventually accepted by the community of Tshamahansi in September 2022. Currently 268 households entered into compensation agreements and have received compensation. Negotiations with the Ga-Magongoa community are ongoing. A second phase of the LRP, comprised of livelihood projects for PAPS is planned for 2023.

Platreef made an offer of alternative grazing land to the communities of Ga-Magongoa and Kgobudi. The offer has been accepted by the Kgobudi livestock owners and plans are underway to relocate their livestock to Ivanhoe's "New Horizons" farm. Further engagements are being held with the livestock owners of Ga-Magongoa community on the alternative grazing land. Socio-economic factors have influenced the view of Magongoa community on both the land and once off compensation offers. As Platreef evolves there is increased expectation for economic benefit by the surrounding communities. Further engagements with the community, supported by independent opinions on the proposed offer, are expected to assist Ivanhoe and the community to reach agreement.



6

OUR PLANET

Anthropogenic impacts on the environment are causing significant, irreversible degradation of our planet's ecosystems, biodiversity and natural resources. In order to be sustainable and resilient in the long-term, business continuity must be considered within the context of finite resources. In addition, the businesses must advocate for responsible consumption and production. Ivanhoe Mines is committed to sustainable development and to protecting the environment from pollution and degradation while seeking to leave behind a legacy that supports the needs of both present and future generations.

Members of the environmental department and community beekeeping beneficiaries ready to engage with the bees at the New Horizons Apiary near the Platreef Project.



Alignment with Ivanhoe's Priority SDGs

Our commitment and approach to environmental stewardship

1 Stewardship

Ivanhoe Mines is committed to responsible environmental stewardship throughout our mining life cycle, and across our zone of influence (which includes contractor performance). Our governance approach is rooted in compliance with all applicable environmental laws and regulations in our host country jurisdictions, as well as being guided by global and industry best practice. Ivanhoe implements measures to (i) avoid or prevent negative impacts on the receiving environments in which we operate and where these cannot be prevented, to mitigate/minimize such impacts; and (ii) contribute to the furtherance and achievement of our priority SDGs – SDG 6 (clean water and sanitation), SDG 12 (responsible consumption and production), SDG 13 (climate action) and SDG 15 (life of land).

2 Proactive environmental performance

In striving to improve our environmental performance and advocating for the least adverse impact on the natural environment as a result of our operations, value- and supply chains, and final products and services and broader zone of influence, our strategic environmental stewardship approach comprises proactive, integrated, and sustained environmental management, which is underpinned by continuous feedback and improvement. We are continuously reviewing and aligning our environmental systems and controls.

3 Conservation and protection

We acknowledge the important interlinkages between the development and implementation of sustainable, inclusive land use planning procedures and alternative livelihood practices. We value and respect natural, cultural and heritage resources. We thus strive to protect and conserve biodiversity areas and species, ecosystems, and areas and objects of heritage and cultural value in our host countries, host communities and operational environments.

4 Decarbonization

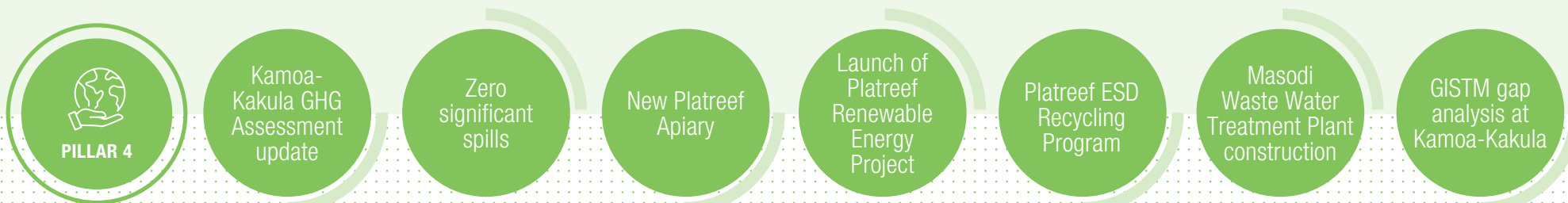
The objectives of the Paris Agreement in addressing the risks and impacts of climate change are the responsibility of states and businesses alike. By implementing adequate and effective adaptation and mitigation measures, and continually seeking ways to reduce our carbon, waste and water footprints, we have devised a climate change strategy underpinned by four broad areas: low emissions technology, portfolio positioning, reporting pathways and stakeholder resilience.

5 Water stewardship

We are committed to responsible water management in support of the UN SDGs. We strive to adopt sustainable practices that promote and ensure responsible consumption, with a special focus on water-stressed regions in which we operate and areas that are most vulnerable to climate change impacts.

6 Transparency

Through the development of our bespoke Sustainability Management System, we are now able to concentrate our approach and efforts across a range of material globally- and locally aligned ESG standards and reporting metrics, allowing for an enhanced and more accurate reporting lens. We will continually enhance our corporate sustainability reporting.



7 Tailings management

We are committed to tailings management that meets or exceeds global best practices for safety during all phases of the mine lifecycle.

8 Engagement and capacity-building

In the spirit of engagement and capacity building, we endeavour to facilitate environmental awareness and maintain social trust in our host communities through training and awareness campaigns. This allows us to holistically and contextually address the scope of environmental impacts and risks from and on our operations; and strategically drive efforts towards realizing opportunities to support projects, people and priorities which create sustainable, resilient solutions and long-term, shared value.

9 Responsible value chain

Responsible sourcing and mining practices require a recognition of and respect for social and environmental considerations in the value chain, exclusive of human rights. We are committed to ensuring respect for the rights of employees, host communities and society to an environment that is not harmful to their health and well-being, both in our own environmental stewardship approach as well as in our supply chain management report. We strive to implement an integrated and inclusive environmental stewardship and management approach, to ensure that all role players in our value chain respect the natural environment in our host communities and host countries.

PROACTIVE ENVIRONMENTAL MANAGEMENT

- Compliance with applicable legal frameworks
- Baseline, risk and environmental impact assessments
- Engineering controls and best practices
- Environmental Management Plan
- Technology and innovation to reduce footprints
- Climate risk and vulnerability assessments



RESPONSE-DRIVEN ENVIRONMENTAL MANAGEMENT

- Stakeholder environmental capacity building
- Reporting to and engagement with stakeholders
- Systems and controls
- Environmental monitoring and data updates
- Timeous and effective response to incidents
- Mitigate and manage impacts
- Climate change adaptation and mitigation plans

Compliance, monitoring and awareness

The impact of mining on the surrounding environment varies across projects. Each operation impacts the natural environment in similar, but also fundamentally different ways. We implement processes and controls to proactively identify and address the risks and opportunities that are borne from these impacts, and we ensure that all our operations undertake and disclose the necessary environmental and social impact assessments (ESIAs) and develop appropriate environmental and social management plans (ESMPs). In alignment with both local laws and regulations and international standards, our projects have undertaken the relevant ESIs. These have also recently been updated, as necessitated by our phased project construction and development activities.

Project ESIA updates, 2022

Kamoa-Kakula

- Approved in July 2022
- Updates covering the Phase 3 expansion (including the smelter) Kansoko concentrator, and the Kamoa 1 construction box-cut development

Platreef

- Submitted in December 2022
- Updated specialist studies and public participation conducted to cover the Phased Development Plan (PDP)
- ESIA application for the new 5MW solar plant submitted in 2022; approved in March 2023

Kipushi

- Submitted in 2022; approved in February 2023
- Updated following the end of the previous *force majeure* event and covers the entire mining exploitation permit

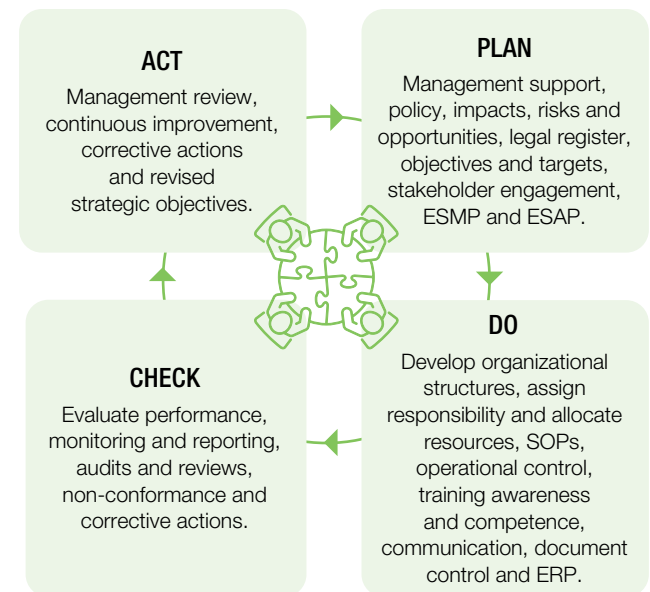


Hendrietta Sarile, Environmental coordinator: systems and compliance, conducting dust monitoring at the Platreef Project.



Arthur Oosthuizen, General Manager, Sustainability, outlining the environmental monitoring performance during an investor visit at the Platreef Project.

It is an essential objective that compliance with these ESMPs, local laws and regulations, licence conditions and best practice is correctly managed, together with an established and maintained environmental management system appropriate at each of our projects. Dedicated environmental monitoring occurs across all projects and regulatory reports are filed as required. Our integrated web-based risk management solution, which is routinely updated to incorporate legislative and/or licence amendments, is aligned to the relevant ISO standards (ISO 9001, 14001, and 45001). The solution gives control and visibility over the full continual improvement life cycle. In 2023, we aim to undertake a gap analysis of our environmental management systems, at both our Platreef Project and Kamoa-Kakula Copper Complex to assess certification readiness.





Changdong Liu, Kamoā Technical Executive, Smelting and David Mitchell, Kamoā Senior Project Manager, Smelter, indicating the location for the new direct-to-blister flash furnace ('DBF') smelter at the Kamoā-Kakula Copper Complex.

In 2022, our operations recorded no adverse material impacts. One non-material environmental incident was recorded at our Kamoā-Kakula Copper Complex, owing to a sewage spill from the contractor treatment plant, following which the collapsed wall was rebuilt and the leak fixed. This incident which potentially could have been significant was mitigated and closed out by the contractor with our oversight and according to the relevant standard operating procedures. Controls were also implemented in the affected areas to prevent reoccurrence of similar incidents.

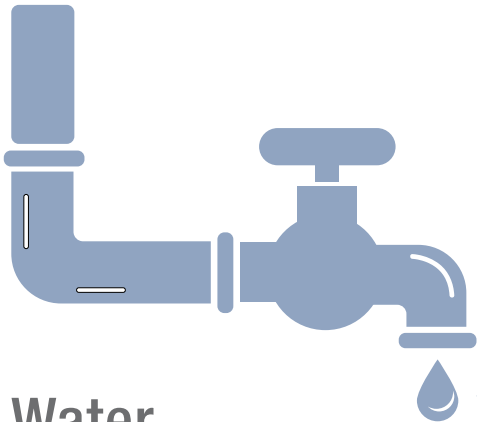
Every two years, regulatory external environmental audits are undertaken in the DRC, with the most recent audit undertaken at both Kamoā-Kakula and Kipushi in 2022. The audit performed by independent consultants, EmiAfrica, at Kamoā confirmed no non-compliances and that the EMP is effectively implemented. The audit undertaken at Kipushi confirmed effective environmental performance. However, it recommended an improved focus on waste management. At the Platreef Project, two independent external audits were undertaken for both the Project's water use licence as well as the approved EMP, scoring 94% and 97% compliance respectively. These compliance scores, as well as the fact that there were no non-compliances identified as part of these audits, are a testament to the outstanding environmental stewardship on site. Regular internal audits are also undertaken at each project, reporting results to all relevant departmental heads and making use of an "action tracker" where actions are assigned and tracked using the environmental and social management software, IsoMetrix.

The equipment financing arrangement at Kamoā-Kakula with the lender group – comprised of Standard Bank of South African (SBSA), the Swedish Export Credit Agency (EKN) and the Swedish Export Credit Corporation (SEK) – has reached the end of its 24-month ESAP period agreement in December 2022. The ESAP is expected to be closed out early in 2023, and the lender group has retained their independent environmental and social consultant, IBIS Environmental Social Consulting Governance South Africa (Pty) Ltd, to conduct ongoing environmental and social (E&S) monitoring against the IFC's Performance Standards, which will continue until maturity of the credit facility.

Environmental training and awareness is a key priority for Ivanhoe to ensure employees are aligned and informed on the changing landscape of environmental matters. All employees at our projects are trained on environmental requirements upon joining the organization as part of their induction process. SOPs are developed for all activities likely to impact negatively on the environment and a training matrix is used to identify employees needing training on specific SOPs. On an annual basis, training is undertaken across all sites and refreshed as and when required. Internal environmental awareness is also undertaken and includes internal magazines, monthly talk topics on environmental related issues, and HSE meetings. Environmental awareness is also enhanced through external training with various community organizations, community members, and schools.

Ongoing environmental staff capacity building is undertaken throughout the year. In 2022, the environmental teams at our projects were trained on:

- Environmental management
- Inspection and risk management
- Water quality monitoring
- Laboratory management and leadership
- ISO14001:2015: Environmental management systems
- Mine closure and land rehabilitation
- GIS integration



Water stewardship

The increasing global need to enhance water stewardship has moved up the ranks of sustainability issues across all industries, most notably, mining. Ivanhoe acknowledges and recognizes the necessity of responsible water stewardship within the mining context and implement measures to strategically secure and efficiently use water as a precious resource within and beyond our mining footprints.

Ivanhoe Mines' water strategy is governed at the Board level through the Sustainability Committee. Our water use strategy and operational objectives are informed by robust engagement with numerous stakeholders, including investors, policymakers, peer organizations, non-governmental organizations and host communities.

Ivanhoe's water stewardship strategy is rooted in:

- the increasing global awareness of water security challenges
- the acknowledgment of the human right to water and sanitation
- recognition of environmental linkages, such as climate change impacts
- our commitment to responsible water use, in support of the SDGs



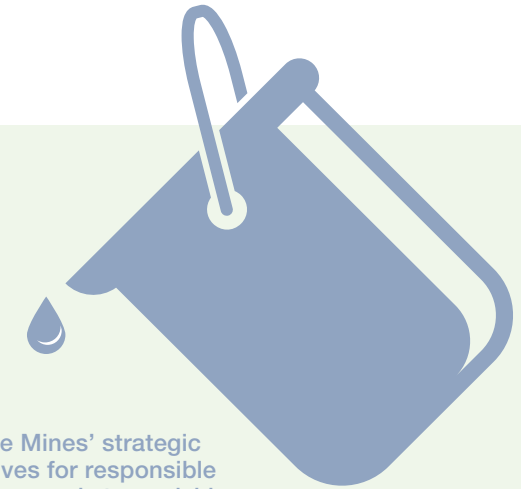
Our water stewardship entails the following overarching actions:

- monitoring and ensuring freshwater availability
- using water efficiently
- maintaining local and regional water quality and engaging with local stakeholders and communities to collaboratively manage shared water resources throughout the mining life cycle

Freshwater availability and water security

As a group, Ivanhoe is acutely aware of the water challenges faced in both South Africa and the DRC. Our water stewardship and risk management strategies and systems strive to accurately and efficiently address environmental concerns and to ensure water security for current and future water users in our project affected areas, integrating a number of these contextual issues – including basin/catchment level water availability and stakeholder conflicts, as well as water-related regulatory frameworks and the status of ecosystems and habitats.

In striving to achieve the targets of our priority SDG 6 (clean water and sanitation), Ivanhoe further acknowledges the vital need for water stewardship which does not only relate to the availability of water, but also access to potable water.



Ivanhoe Mines' strategic objectives for responsible water use and stewardship:

- alignment with public policy initiatives and objectives;
- implementation of water-related commitments beyond regulatory compliance;
- voluntary public disclosures and reporting, alongside regulatory reporting;
- innovative approach to water-related matters;
- continued stakeholder awareness and education;
- continued improvement in environmental performance practices in respect of water-related issues;
- a holistic approach to water-related risks; and
- the provision of accessible, safe Water, Sanitation and Hygiene (WASH) programs for our workforce.



Annick Walsdorff, Superintendent I Environment, Kamoā-Kakula Copper Complex.



Mudcat (dredger) operator at Kakula Mine, Kamoā-Kakula Copper Complex.

Our projects are situated in regions of the world where water risks and impacts range from poor to good water quality and scarce to excess water quantities. Within these contexts, we must ensure that there is appropriate access to clean water, for both our projects and our personnel, as well as host communities where mandated. Ivanhoe assesses its exposure to water quality and quantity risks using both the WRI Aqueduct Tool and the WWF Water Risk Filter, which provide interactive locality maps with which water-related risks can be assessed.

In managing these water-related issues and exposures, we adopt a number of processes and controls. These include:

- assessing our projects' exposure to water quality and quantity risks using both the WRI Aqueduct Tool and the WWF Water Risk Filter, which provide interactive locality maps with which water-related risks can be assessed;
- aligning our water risk assessments with water regulatory frameworks (both local and international) to ensure compliance and allow operational and executive level monitoring of developments which might impact our risk profiles and assessments; and
- keeping a close eye on climate change movements and developments that affect current and future water availability and quality, and notifying project team of associated risks.



Adolphe Moleka, Senior Environmental Officer, conducting water testing at the environmental laboratory at Kamo-Kakula.

Kamo-Kakula and Kipushi Projects

While water sources are abundant in the DRC and our assessments to date indicate that there are multiple potential sources of water supply for the Kamo-Kakula and Kipushi projects, both Projects must monitor a continual risk of flooding of the underground infrastructure. Risk management strategies include primary dewatering systems, as well as backup systems in case of failure and continual monitoring of the quality of all water being discharged.

Furthermore, engineering designs and controls, primary and secondary pumping stations, diversion drains, dam walls and natural aquifers (such as wetlands) are put in place and continuously maintained to prevent, mitigate or reduce the impact of flooding.

Although water quantities are currently high in the DRC regions, the risk of water scarcity has not been overlooked and is considered a medium risk. This risk comes into play as a result of the impacts of climate change and the unpredictable variability thereof, which we continuously monitor in respect of impacts or changes to the water availability at Kamo-Kakula and Kipushi.

Groundwater is used at both our Kamo-Kakula and Kipushi operations to supply the projects' water requirements. Kamo-Kakula operations are optimally designed to ensure the reuse and recycling of water in its mining processes. Any surplus water from mine dewatering which is not required for the plant operations, as well as any recycled water from the Tailings Storage Facility (TSF), will be sent to the relevant settling pond (and treated with appropriate flocculent, if required) prior to the overflow being discharged to local watercourses. Groundwater at our Kipushi Project is the primary source of water used for mining and processing and will continue to be as the project ramps up for commissioning of production.

Due to our DRC operations' reliance on hydro-power for uninterrupted electricity supply, it is imperative that Ivanhoe continually assesses the impact of fluctuating water availability for its hydropower stations (Inga and Mwadingusha) and ensures that these are maintained appropriately, in order to secure continuous operations with no or minimal disruptions or reductions to production capacity.



Aerial view depicting construction progress of the Masodi Waste Water Treatment Plant in Mokopane, Platreef Project.

The Platreef Project

The Platreef Project is located in the Olifants River Basin in the Limpopo Province, in the north-eastern part of South Africa. The WRI Aqueduct Tool identified the Platreef Project as an “Arid and low water use” water stressed area. South Africa is generally considered a water-scarce region and the Mogalakwena region currently has a medium-risk drought tendency.

Due to the water stressed state of the Platreef Project area, it withdraws the least amount of water in proportion to the rest of our sites (under 1%). The water withdrawal has remained relatively consistent and insignificant in relation to Kamoakakula and Kipushi over the past three years.

Climate change impact projections have indicated that the Platreef region is likely to become even more water stressed in the nearby future. As Platreef commissions production in 2024, it is essential that the scenarios of less water accessibility are effectively managed to mitigate the risk of reduced production values. Securing sufficient sources and quantities of water poses a challenge for the Platreef Project.

The current relative scarcity of water in the region led to innovative mine planning and a closed water system during construction, as well as the consideration of environmentally sustainable bulk water supply for the production phase. Regional collaborative efforts are also imperative to ensure that the region develops the appropriate shared resources so all stakeholders, including host communities, can secure access to the necessary quantities of clean water.

Early in 2022, Ivanhoe signed an offtake agreement with the Mogalakwena Local Municipality (MLM) that will provide local, treated water to supply the bulk water needed for Platreef’s ongoing underground mine development and surface infrastructure construction, including Phase 1 and 2 operations. Recycling locally treated water is a cost-effective and sustainable approach to securing water for the mine’s production. The MLM has agreed to supply a minimum of 5 million litres of treated water per day for 32 years, from the town of Mokopane’s new Masodi Waste Water Treatment Works (WWTW). Initial supply will be used in the Platreef Project. Construction works of the WWTW continued throughout 2022.

Water consumption

Ivanhoe’s water use trends indicate that the group-wide water consumption has increased by 35% from 2021 to-date, largely attributed to the phase 3 ramp up at our Kamoakakula Copper Complex and the increasing construction activities ongoing at Kipushi. Both sites saw an approximate doubling of water withdrawal since 2021. The total fresh water withdrawn from all sources was 66,000 MI, which is a 54% increase from 43,000 MI in 2021. Along with an increase in withdrawal at Kamoakakula, our mining complex increased its water discharge by approximately 74% from 2021 due to the increased production rates.

Water pollution

Water quality monitoring is undertaken proactively at each of our projects in order to ensure compliance with both local requirements and alignment with international standards and our environmental and water stewardship principles. Our water risk and environmental assessments include the current and emerging regional water quality issues and those that arise as a result of inevitable mining operations. It is vital that Ivanhoe effectively manages any negative impacts of water pollution to ensure that clean water remains accessible for host communities who rely on it for consumption, hygiene and sanitation.

We acknowledge that the overall quality of ecosystems and habitats is a fundamental factor for Ivanhoe and our sites throughout all phases of the mining life cycle, both in maintaining each social licence to operate and in adhering to relevant environmental management standards and laws. The update of the ESIA and associated EMP at Kamoakakula has focused on the efficient management of water use and effluent quality throughout the mining complex’s operations using a stepped modification process based on new geohydrology assessments which have prioritised highest risk areas. The marked improvements in ground and surface water related infrastructure have also been driven by ongoing monitoring efforts as part of compliance with the ESAP, in line with IFC Performance Standards.

All our projects have adopted their own set of limits for water quality (taking into account both local requirements and international standards), which are assessed through ongoing monitoring and supporting measures, such as silt traps and flocculant aimed at improving water discharge quality as and when required.

Due to the water-abundant regions that our DRC projects are situated in, the risk of flooding at Kamoakakula and Kipushi remains high. This risk is likely to be exacerbated by the increasing likelihood of less frequent, but more extreme rainfall events as a result of climate change.

The increased rainfall intensity and higher risk of significant floods may lead to environmental pollution from the contamination of potable water and groundwater from overflowing water storage facilities (such as settling ponds and the TSF), as well as the degradation of soil quality and fertility. To streamline the flow of water used in operations at Kamoia-Kakula, specific discharge points have been discontinued while the removal of sediments through a thorough dredging clean up is being undertaken. Stormwater ponds are also in the process of being re-purposed to allow for suitable capacities and reduce the risk of polluted water overflow. Ongoing monitoring at strategic discharge points and settling ponds has indicated that water quality, in line with both DRC local and IFC international standards, has continuously improved. Kamoia is also in the process of assessing the feasibility of the construction of artificial wetlands and bioremediation which will serve to filter and purify mine effluent and improve the water quality prior to flowing into the local drainage system.

Ivanhoe continuously evaluates and ensures that the required capex is available for response strategies and infrastructure in the event of significant flooding that may have the potential to lead to both environmental and social harm at our DRC and South African projects. Although Platreef is classified as a water scarce region, there is still the potential for extreme high-risk flooding as a result of climate change related impacts. For this reason, all our projects have in place emergency response plans which are strictly aligned to their regulated floodlines, as well as primary, secondary and backup dewatering systems in the event of failure. Ivanhoe also frequently maintains its mine infrastructure, including stormwater channels and ponds, dam walls and associated piping.

It is essential that Ivanhoe responsibly manages the day-to-day provision of potable water for its entire workforce to effectively mitigate the risk of the spread of pollution and disease in water systems to both the environment and humans. This is done through the provision of fully functioning, safely managed WASH services for the workforce, especially having regard to female, vulnerable and disabled employees. At our Platreef Project, a reverse osmosis plant has been installed, which has begun providing potable water for employees and contractors both underground at Shaft 1 and above ground at the main office block and which is regularly monitored and assessed to comply with SANS241 water quality limits. In 2022, Platreef also commenced with additional sanitation services for the underground workforce, ensuring optimal healthy working conditions.

Ivanhoe's response to water risk for our host communities

We recognize the possible tensions between our reliance on the appropriate quantity and quality of water to progress and sustain our principal projects, and the requirement to use this precious shared resource as efficiently as possible. It is essential that Ivanhoe acknowledges that local communities play an integral role in water management practices in and around our mining footprint because water is a shared resource without which neither Ivanhoe nor local communities can survive. Each of our sites must effectively manage any potential stakeholder conflict concerning water resources as part of our social licence to operate, and in accordance with our formal stakeholder engagement and grievance and complaint mechanisms.

As water quality has been a recurring grievance topic from our host communities, our community relations teams, in conjunction with our environmental teams, have prioritized continuous feedback and engagement with the relevant community members and committees in order to create a stable working environment that allows for the enhanced provision of clean water and mitigates any risk of environmental or social harm. In addition, the 2022 Materiality Assessment identified water and sanitation as a material issue to our stakeholders.

Ivanhoe continues to drive its water resource management and stewardship practices towards achieving our material SDG 6 targets which are relevant to Ivanhoe's operations and commitments to local communities. Ivanhoe has prioritized water-related provision and service community development projects as part of the Group's overarching sustainable development plan. Each project strives to enhance the livelihoods of our host communities through the development and implementation of various initiatives which include borehole, water well, reticulation and sanitation projects which seek to make provision for clean potable water to the host communities in South Africa and the DRC. Other significant projects include the provision of safe WASH facilities at local schools, clinics, Early Childhood Development centres (ECDs) and central community areas.



Senior members of the Ga-Magongoa Traditional Council at the handover of the refurbished municipal borehole.

Special Report

Water is life

As part of the second Social and Labour Plan (SLP), Platreef committed to the refurbishment of water supply infrastructure in various communities. This is in line with the Integrated Development Plan of the Mogalakwena Local Municipality (MLM) as well as SDGs 6 and 12.

Platreef worked closely with the municipality to address the scarcity of water in the host communities. It was discovered that the MLM had installed pipes and infrastructure for the provision of water and due to theft of equipment and minimal maintenance the communities struggled to obtain access to the water.

Commencing with the restoration of five boreholes in Ga-Magongoa, this multi-phased project is expected to be completed within the five-year SLP 2 timeframe, benefitting the Ga-Magongoa, Tshamahansi, Sekgoboko, Ga-Kgobudi, Ga-Mokaba, Malepetleke, and Kgobudi 2 communities.

A local youth-owned company, MJ Mokwena Construction & Projects, assisted on the project implementation, promoting local buy-in, as well as skills transfer and local employment.

Special Report

Special Report Case Study at Kipushi

Context setting

Ivanhoe’s Kipushi water initiatives are driven by the need for improved access to water and sound hygiene and sanitation practices which facilitate healthy and thriving communities. Ivanhoe identified an opportunity to provide better access to water to communities and in 2021 refurbished the pump station to replace the existing aging infrastructure. The pump station supplies one million litres of potable water per hour to the Kipushi town’s residents.

In 2021 Ivanhoe Mines invested into the refurbishment of the pump station that was pumping water into Kipushi town and surrounding areas. Ivanhoe invested \$1,000,000 to ensure the consistent and continued provision of 1 million litres of water per hour, over 24 hours a day, 7 days a week to 20,000 households.

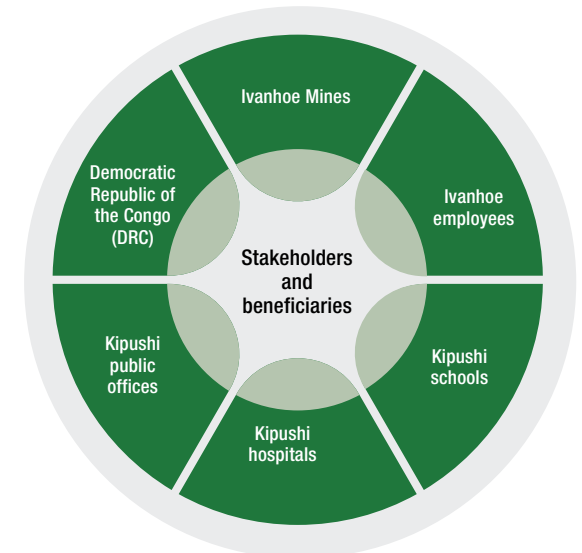
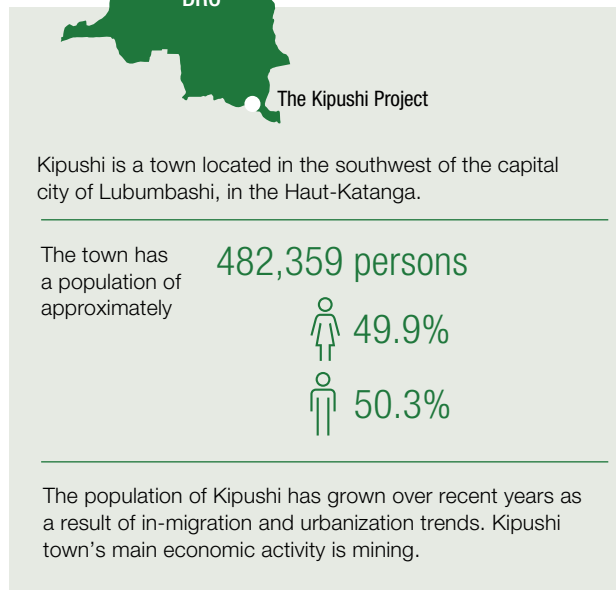
Prior to the Ivanhoe investment into the Kipushi Project, Gécamines was responsible for the provision of water for the Kipushi town and its population of c.100,000. When Ivanhoe invested into the Kipushi Project in 2011, the Company took over the provision of water into the town. Prior to the refurbishment, the old water pump would encounter breakdowns at least once every two weeks and lasting from 4 hours to 2 days; during this time the community in Kipushi would have to seek alternative means of sourcing water, some of these alternatives included collecting water from the lake or wells located further from the community.

Since the refurbishment of the water pump station the community now has consistent access to water, this includes the general public, schools, hospitals, and public offices. The Kipushi engineers ensure that there is adequate maintenance of the water pump by conducting routine maintenance which can cost up to \$70,000 per month. This maintenance is fully funded by Ivanhoe as part of their commitment to the Kipushi community to ensure maintained provision of water.

The Kipushi water pump project is focused on the mine’s area of impact, servicing an estimated population of 100,000 persons, including mining employees, schools, public offices and hospitals.



Refurbished water pump station near the Kipushi Project.

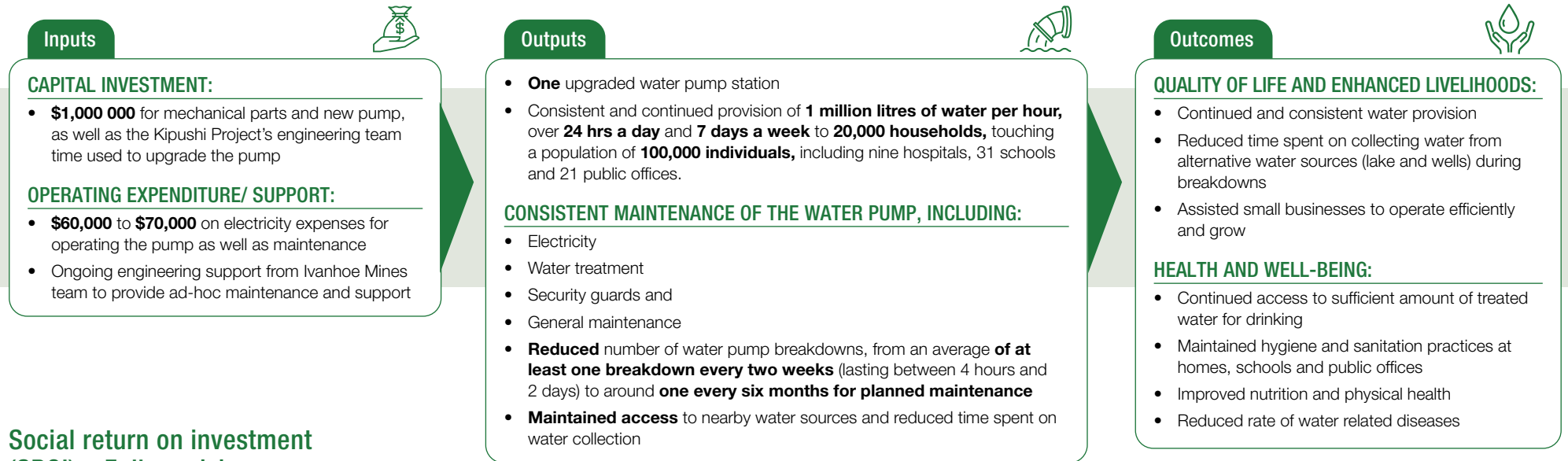


The population of Kipushi has grown over recent years as a result of in-migration and urbanization trends. Kipushi town’s main economic activity is mining.

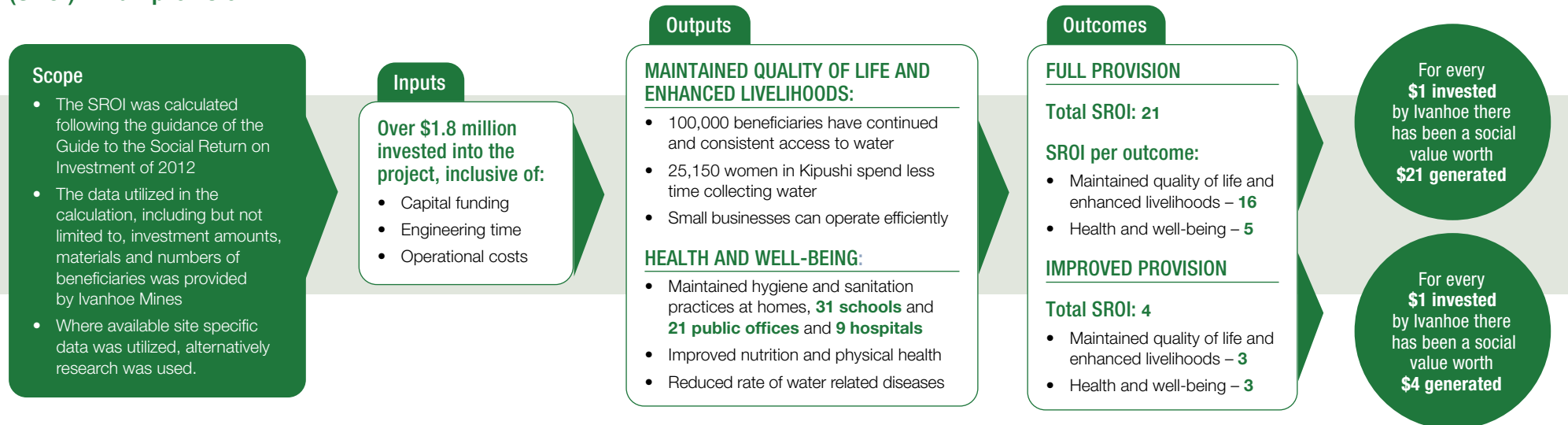
Scope and theory of change

The provision of clean water is one of the Kipushi Project's Social Development Initiatives that aims to increase quality of life of local stakeholders and also prevent water borne diseases. This is evidenced by the mine's previous project which focused on building five water wells in the Kipushi community.

The current case study focuses on the refurbishment and upgrading of an existing water pump. The water pump had been operated by previous mine owners, prior to Ivanhoe Mines taking over; aged and frequently experienced breakdown, it was not able to service the Kipushi community consistently. EY identified and assessed the impact of the refurbished water pump within the Kipushi community.



Social return on investment (SROI) – Full provision



Climate change, energy and GHG emissions

Climate change

As the climate continues to change, the challenges brought about by its shift pose a constraint both to our business, as well as the biophysical and social environment within which we operate. Managing the risk of climate change requires a dual effort to adapt or adjust to its current and future effects, as well as mitigate its impacts through reducing emissions or transitioning to lower carbon alternatives as part of our daily operations and practices.

Given the uncertainties which a changing climate poses, it is imperative that Ivanhoe takes a proactive response to climate change. In doing so, we can provide the foundation required for achieving the objectives associated with the “just transition” and “climate resilient development”. These speak to a transformative, integrated and systemic approach to development which puts people at the centre of decision-making, thereby ensuring environmental sustainability while at the same time ensuring quality work, social inclusion and the eradication of poverty are factored into our daily practices. The “just transition” will fundamentally require the sustainable and secure supply of essential metals for renewable technologies and the training and reskilling of new capabilities necessary for transitioning markets. Our projects are continuing to reach further into the global market to supply these critical metals, which include copper, platinum, palladium, nickel, rhodium, zinc, germanium, and silver.

In supporting and progressing the global goal as far below 1.5 degrees Celsius as possible – Ivanhoe advocates for the pursuit of access to innovative, reliable, and affordable renewable energy to support economic development and

improve the living standards of people across the world. We are considering alternative analyses and options (such as solar power and alternative battery storage) to allow flexibility and the projects’ resilience in the face of unforeseen negative impacts, primarily as a result of climate change. It is vital that we drive our projects into the “just transition” in a phased manner, that this transformation ensures the phasing out of fossil fuel sources into alternative sustainable sources to create new jobs, skills, and opportunities for equality and a resilient regional and global economy.

Ivanhoe Mines’ Board governs the phased response to climate change and is actioned through the Sustainability Committee. Ivanhoe’s executive management holds primary responsibility for the strategy and implementation of an effective position on, and response to, the evolving climate change landscape. Regular engagements with key stakeholders, including investors, policymakers, peer companies, non-governmental organizations and host communities, further inform our climate change strategy and operational objectives.

Climate change reporting and way forward

Ivanhoe has continued its alignment of climate-related disclosures with the 11 recommendations of the Task Force for Climate-related Financial Disclosure (TCFD), as well as global best practice and global development goals. Ivanhoe strives to provide relevant, clear and consistent climate-related information to its stakeholders with regard to our Governance, Strategy, Risk Management Metrics and Targets, as outlined by the TCFD.

Governance

Ivanhoe strives for the responsible stewardship of essential metals and resources across our supply chain and towards achieving the global goals set out to combat the impacts of climate change. Oversight on all issues related to climate change is the responsibility of our Sustainability Committee. The committee assists our Board to integrate sustainable best practice into our policies and practices, including issues pertaining to climate change mitigation and adaptation, energy efficiency and water conservation. The Sustainability Committee ensures development, implementation and monitoring of our sustainability policies which drive the continuous refinement of our sustainability commitments.

In 2022, the SDGs materially impacted by our operations were further integrated into our practices by embedding workshops across multiple levels of management within our operations. Ivanhoe continues to align with the corporate adaptation goals and strategies specified for SDG 13: Climate Action, that were set out and developed as part of the implementation plans for public adaptation efforts and community risks at our operating locations.



DRC National Committee for the Protection Against Ionizing Radiation (CNPRI) inspection underground for radioactive sources. The inspection team is accompanied by Francois Kalenga, Environment Technician, Kipushi Project.

Strategy and risk management

Ivanhoe recognizes the central role of the mining sector, particularly of our mines, in contributing towards the “just transition”. The channel to provide green metals to the global economy is pivotal in achieving climate change goals. Ivanhoe Mines is acutely aware of how climate change exacerbates potential socio-economic and environmental impacts and what effects these can have on our projects. Therefore, we continue to use the identified associated risks and opportunities in the management of these impacts.

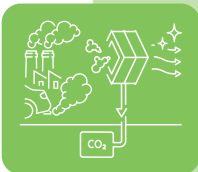
Climate change poses short-, medium-, and long-term risks to both our own operations and to our stakeholders. The short- and medium-term risks mostly impact the direct operations and the operations in Ivanhoe’s value chain, such as disruptions due to severe weather events or damage to infrastructure.

Long-term risks are associated with market behavior as the world transitions to electric vehicles. The demand for platinum is expected to drop as the world transitions from internal combustion engines to electric motors. However, the same transition is expected to increase the demand for copper, which is a principal metal used in low-carbon technologies.

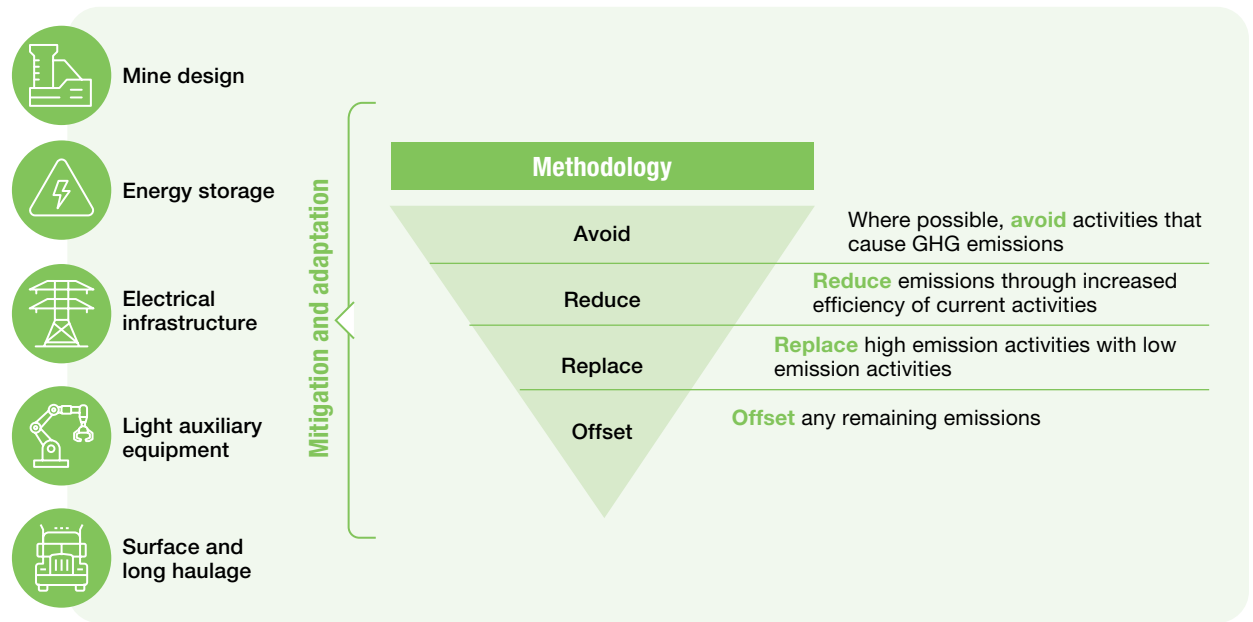
In 2023, we intend to work towards a group-wide decarbonization strategy and roadmap to combat the identified risks associated with climate change and to strive towards net zero.

Key objectives of our decarbonization approach:

- Review our carbon baseline – determining Scope 1, 2 and 3
- Determine where decarbonization is possible on an activity-by-activity basis
- Review target setting and net-zero options and link to strategy
- Use offsets aligned with our values and community objectives to achieve net-zero where decarbonization is not possible

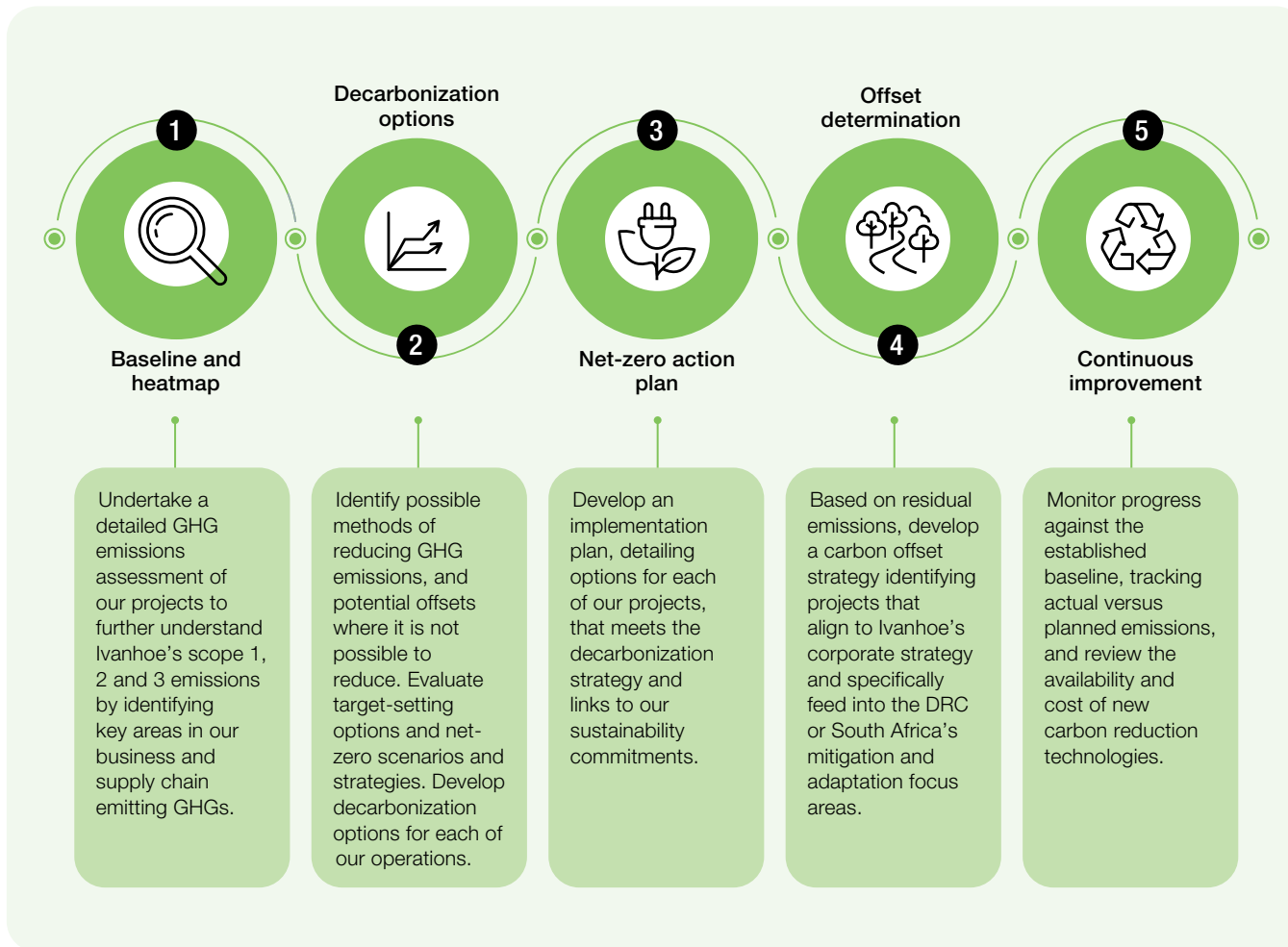


Our decarbonization methodology adopts the mitigation hierarchy which we apply throughout our mining lifecycle.



Aerial view of the Mwadingusha hydro-power plant.

Developing Ivanhoe’s decarbonization pathway



Metrics and targets

Key climate-related achievements:

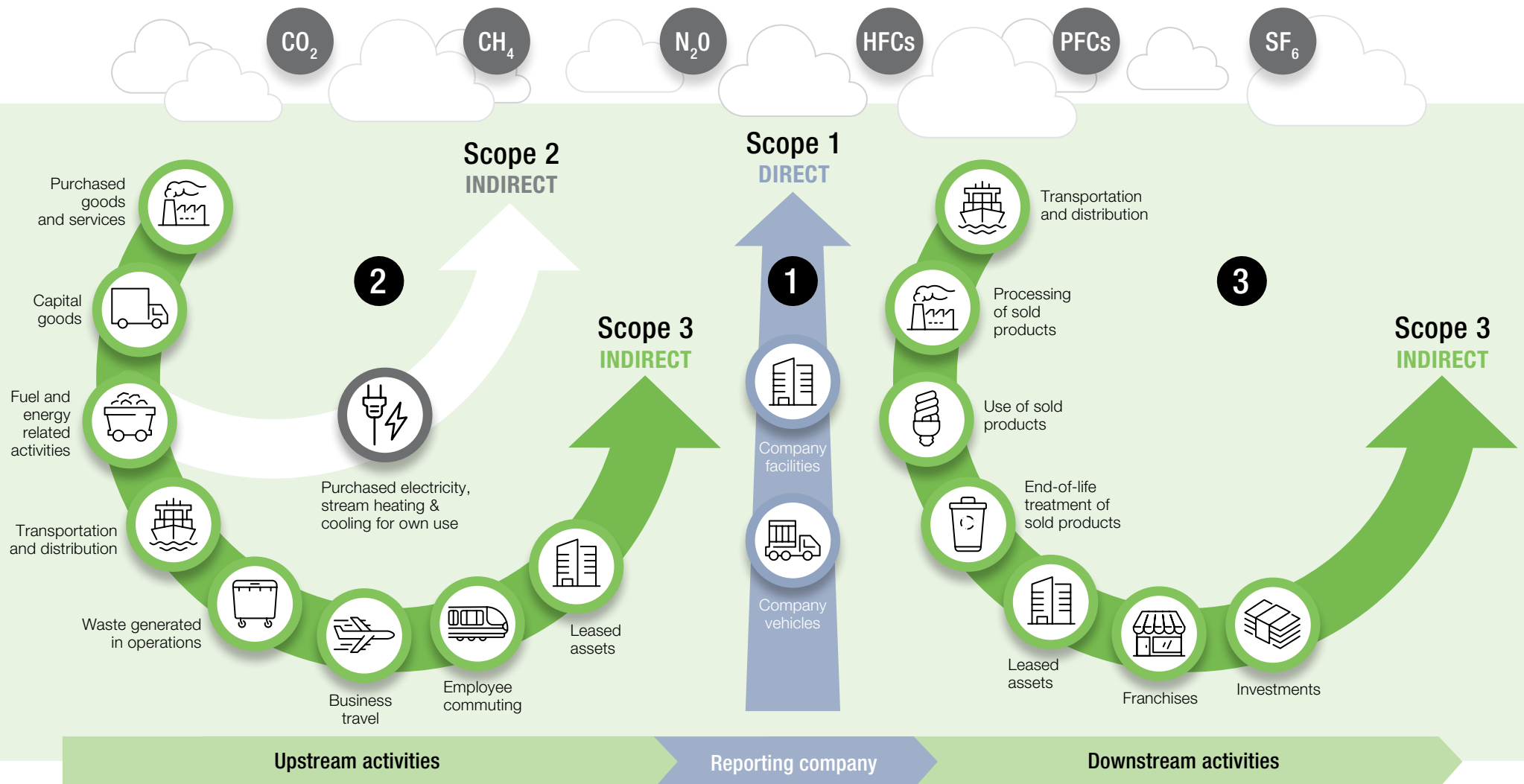
- Updated GHG assessment and development of alternatives roadmap for Kamoakakula
- Implementation of emissions-free battery electric vehicles at Platreef
- Commenced procurement for the 5MW solar photovoltaic plant at Platreef

Ivanhoe continues to implement and strengthen our monitoring system, enabling a streamlined monitoring and reporting practice across our operations. The secure and accessible cloud-based system assists the operations with climate-related metrics reporting, as well as in monitoring our group-wide sustainability targets. Data captured on this system includes metrics such as electricity consumption and fuel consumption. The system also enables Ivanhoe to accurately monitor our progress on our targets. These include commitments such as achieving net-zero for the Kamoakakula Copper Complex (as the only operational mine currently).

In line with the development of our decarbonization road map for each of our operations, and once all operations, (including Platreef and Kipushi) come fully into production, Ivanhoe will set specific targets along with associated metrics to effectively track progress on achieving mitigation or reduction of GHG emissions.

GHG emission mitigation and adaptation

Ivanhoe Mines has considered its operational impact on climate change through our contribution of GHG emissions, including scopes 1, 2 and 3. We take cognizance of the direct and indirect effect our operations have in terms of GHG emissions and accept that we must endeavor to reduce these emissions across all our operations and supply chain, including through offsets where such reductions are not possible.



In line with the Paris Agreement’s objectives, Ivanhoe’s pledge to achieve net-zero scope 1 and scope 2 emissions for our Kamo-Kakula operation was the start of our journey towards decarbonization. In striving to meet our pledge of net-zero, Kamo-Kakula has undertaken an updated GHG assessment of its mining operations to include the construction and operational phases of both current and future development. The assessment has taken into account Kamo-Kakula’s Phase 3 expansion, which will cover a newly built concentrator (at Kansoko), Kamo-Kakula’s smelter, as well as the new Kamo 1 box-cut area. The assessment reaches into our indirect scope 3 emissions to include our GHG emission reach up and down stream. An alternative analysis has also been conducted as part of the GHG assessment, to include potential emission reduction channels across our operations. The feasibility of these options is currently being looked at to determine the best route forward.

Ivanhoe has set out to focus on a thorough alternatives analysis across all three of our project sites. The strategy will entail an in-depth carbon baseline assessment of each operation and will follow with a feasible way forward, at every level of operation, using a hierarchical approach. This will enable Ivanhoe to implement the most efficient and effective technologies and processes to either avoid, reduce, replace or offset our carbon emissions.

The group-wide Scope 1 emissions for calendar year 2022 were calculated to be 51,598 tCO₂e¹. Kamo-Kakula was the largest contributor to these emissions, with approximately 96% of the total scope 1 emissions. This can be attributed to the substantial expansion of Kamo-Kakula’s third phase of development and the use of direct fuels for on-site construction. The group-wide Scope 2 (location-based) emissions are 9,810 tCO₂e for 2022. These are exclusively from the Platreef Project as the only operation which still makes use of grid supply (which is predominately fossil fuels driven).

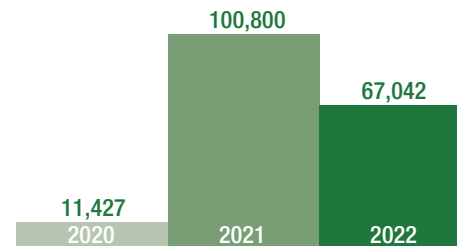
	Kamo-Kakula	Platreef	Kipushi	Group Services	Overall
Scope 1 (tCO ₂ e)	49,637	775	972	214	51,598
Scope 2 (tCO ₂ e)	–	9,810	–	–	9,810
Scope 3 – land (tCO ₂ e)	1,404	119	57	20	1,600
Scope 3 – air (tCO ₂ e)	1,620	1	260	2,153	4,034
Total GHG Emissions (tCO₂e)	52,661	10,705	1,289	2,387	67,042

¹ Tonnes (t) of carbon dioxide (CO₂) equivalent (e).

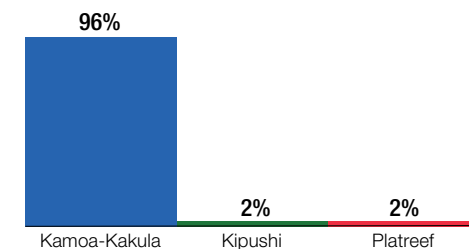


Aerial view of the Inga II hydro-power complex.

Ivanhoe’s emissions trend



Total direct emissions per site, 2022



Ivanhoe continues to calculate its indirect scope 3 emissions from both land (SA and DRC sites) and air related travel (including to our DRC operations). The land travel emissions for 2022 were calculated to be 1,600 tCO₂e. Approximately 53% of the air travel emissions are from Group Services. The remaining scope 3 emissions from air travel are 1,882 tCO₂e, with Kamo-Kakula contributing the most to these emissions. The total scope 3 emissions, including land travel, for the group relating to air travel increased to 5,634 tCO₂e.



Video link

Special Report

Battery Electric Vehicles

Diesel vehicles, ore processing, and ventilation are some of the largest contributors to carbon emissions in mining. The transition from diesel to hydrogen-powered or battery electric vehicles can enable the reduction of carbon emissions, as well as decrease the mine's ventilation requirements because there are fewer fumes from diesel exhaust emissions. Battery electric vehicles include dump trucks, passenger vehicles, and semi-trucks that haul the mined materials. Striving to be a "Mine of the Future", in 2021 Ivanhoe partnered with Epiroc for a significant order of battery-electric mining equipment for the Platreef Project, receiving the new emission-free Boomer M2 Battery face drill rigs and Scooptram ST14 Battery loaders in 2022.

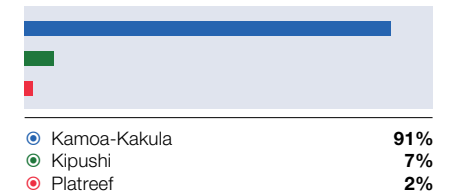
Energy

Kamoa-Kakula and Kipushi source 100% of their electricity from renewable energy sources (national hydropower stations). Upgrades undertaken at the Mwadingusha hydropower plant, as well as the Inga II hydropower complex, in collaboration with the DRC's state-owned power company (SNEL), will ensure life-time renewable energy supply for the operations at Kamoa-Kakula and Kipushi and will allow for a secure foundation to enhance electricity distribution across the national grid (see page 83). This provision of clean energy is in line with our key target to minimize our environmental footprint and aligns with the targets of our priority SDGs, namely SDG 12: Responsible Consumption and Production and SDG 13: Climate Action, also appreciating that they are closely interconnected with SDG 15: Life on Land.

The energy demand across Ivanhoe's three mining operations was 719,264 MWh in 2022, with Kamoa-Kakula, our operating asset, being the largest consumer (91%).

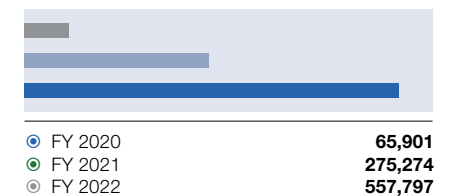
Operation	Total electrical energy (MWh)	Total energy from fuels (MWh)	Total energy (MWh)
Kamoa-Kakula	500,226	155,397	655,623
Platreef	9,169	2,655	11,824
Kipushi	48,402	3,415	51,817
Overall	557,797	161,467	719,264

Total electricity per site, 2022



Operation	Renewable electricity (MWh)	Non-renewable electricity (MWh)	Total electricity (MWh)
Kamoa-Kakula	500,226	–	500,226
Platreef	–	9,169	9,169
Kipushi	48,402	–	48,402
Overall	548,628	9,169	557,797

Electricity consumption trend (MWh)



Air pollution

Ivanhoe continues to follow through air quality monitoring programs across all our operations to manage and mitigate any air pollutants generated. The sites focus on all localized air pollution, primarily in the form of fine particulate matter and oxides of sulphur and nitrogen, which are a leading cause of lung-related diseases and premature death globally. Along with the risk of poor health for local workers and community members, these air pollutants, that are emitted as a result of combustion activities throughout the mining process and value chain, are directly and indirectly linked with the emission of GHGs (thereby furthering the warming of our planet at a micro and macro climate level). Procedures and controls at sources of these air pollutants are in place at all our operations to monitor and proactively mitigate or reduce their impacts.



Indigenous fauna at the Kamoā-Kakula Copper Complex.

Biodiversity and ecosystem management

Ivanhoe acknowledges that the environment in which its operations exist constitutes natural systems consisting of valuable biodiversity and ecosystem services, and therefore it is Ivanhoe’s responsibility to conserve, protect and enhance the natural capital that exists within and around each of its sites.

The United Nations Convention on Biological Diversity (1992), defines biodiversity as, “the variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems”.

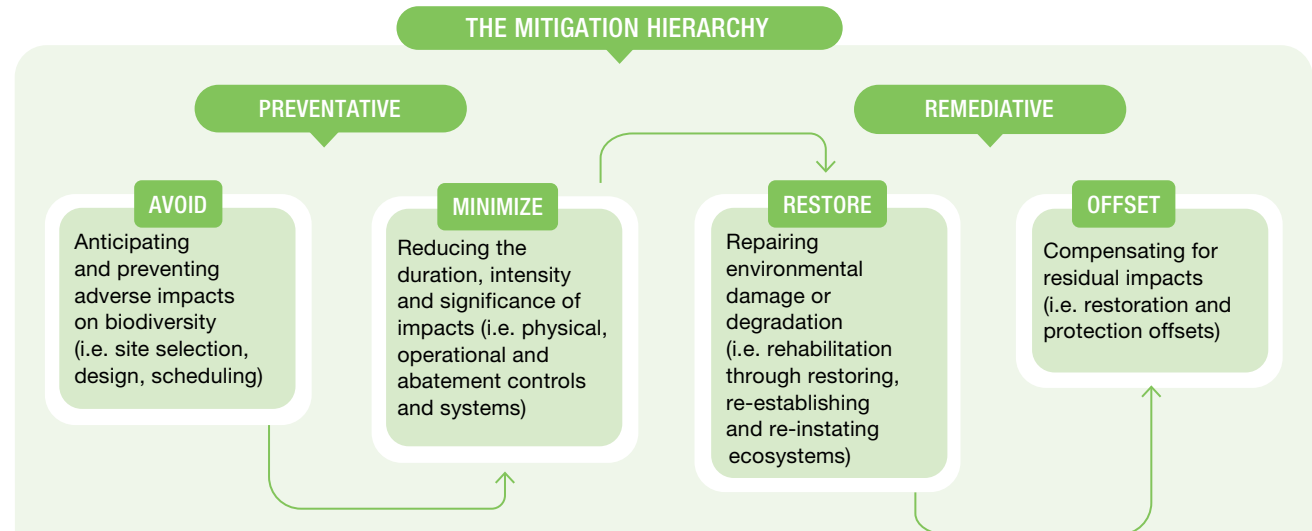
Biodiversity encompasses the variety and the variability of all life on earth, embodying different species – plants, animals, fungal and microbial – which interact with each other in a variety of ecological processes to form ecosystems. These ecosystems and processes, which include humans, are, in turn, the result of the interactions between species and with their physical and chemical

environments. Ivanhoe recognizes that biodiversity is essential for life on earth and to sustain both the mining environment and the livelihoods of local and regional communities.

The rapidly evolving global market, social and regulatory context, stakeholder expectations, ESG and biodiversity litigation, and biodiversity-specific legislation has put a spotlight on biodiversity loss and biodiversity risk as material to companies.

In acknowledging the value of biodiversity for life on earth and the changing landscape, Ivanhoe is critically aware of the impacts of mining activities on water, land and ecosystems specifically. We are also conscious of the regulating, supporting, provisioning and cultural ecosystem services provided by the biodiversity within our mining environments. This drives our goal of responsible stewardship for the natural environment.

Our integrated, innovative systems and solutions based upon the mitigation hierarchy, are implemented by our operations in actively seeking to effectively mitigate the negative environmental impacts, or to enhance the positive impacts.



We recognize the value of engaging and communicating with our local stakeholders for biodiversity conservation by incorporating their knowledge and concerns into our environmental stewardship approach. This also allows us accurately identify critical habitat and species and their relationships with the local environment. Our operations include sustainability teams that work closely with our environmental teams to put forward initiatives to monitor, study, protect, conserve and support these ecosystems for the entire life of mine, as well as post-closure of the mines. Careful land-use planning for the phased development of our mining operations is undertaken in close consultation with local communities and stakeholders, ensuring that a holistic view of the environment is considered.

All three of our projects have updated ESIA's, in accordance with their mining phases, to develop and enhance our environmental systems and solutions. The ESIA baseline information, which includes the impacts associated with specific mining activities at each site, is used as the foundation for the development of appropriate ESMPs with specific environmental management actions, including biodiversity management. The key objectives of our ESMPs are to assure the protection of the local environment, and to propose potential management, mitigation, protection, or remedial measures that will be undertaken to address identified environmental impacts, including through offsets where mitigation is not possible.

Ivanhoe's biodiversity strategy includes a concurrent rehabilitation and management approach and is linked to each stage of development across our projects. At our Kamo-Kakula Copper Complex, all biodiversity risks are proactively mitigated through ongoing field identification and monitoring of fauna and flora, as well as assessments for any clearance or disturbance to vegetation or the natural ecosystem.

Kamo-Kakula continues to undertake reforestation or biodiversity initiatives, which are in line with the mitigation hierarchy, to compensate for unavoidable indirect or residual impacts as a result of mining development. Kamo-Kakula has contracted and been working closely with an independent biodiversity specialist team, to enhance and fast track any further potential biodiversity-related risks as well as overall environmental and sustainable development reporting.



Indigenous fauna at the Kamo-Kakula Copper Complex.

Kamo-Kakula aims to develop its biodiversity and environmental management and reporting using the following key tools and systems:

Monthly environmental awareness

Monthly data analysis and environmental compliance report compilation

Regular site inspections

Implementation of associated environmental management plan actions

Improved GIS and strategic support

Biodiversity monitoring and compilation and implementation of a Biodiversity Action Plan

Area specific aspect registers highlighting trends, risks and areas of concern

In line with Kamo-Kakula's Biodiversity Management Plan (BMP), several key actions are stipulated to either develop or conserve biodiversity in the mining lease area and all directly and indirectly affected areas. Kamo-Kakula's BMP actions continue to make priority provision for "dilungus", a type of grassland that is classified as a critical habitat. Dilungus have many roles, from recharging groundwater aquifers and regulating surface water flow, to supplying water to nearby habitats, making them integral to local ecosystems. Over 3,000 hectares of dilungu have been identified in and around the mine complex. Kamo-Kakula continues to monitor the essential biodiversity areas in its footprint to ensure any identified risk or negative impact is actively and effectively managed and either prevented or reduced.

Kamo-Kakula's beekeeping program has been making progress during the course of the year, to tackle offset challenges arising from unavoidable community deforestation activities. The two most common bee species for honey making are the *Apis mellifera adansonii* and *Apis mellifera scutellata*. The presence of the relatively undisturbed *Miombo* woodlands near Kamo-Kakula and *Cryptosepelum* forests outside the mine's footprint area provide a favorable area for apiculture. Sustainable beekeeping, using hives constructed from wooden crates and pallets, promotes biodiversity conservation, and sustainably supports livelihoods (see page 42 for Coco's carpentry story). In 2022, seven of the communities surrounding Kamo-Kakula were identified as ideal beekeeping or honey extraction areas for the second phase of Kamo's beekeeping program, which aims to expand its footprint targeting additional beekeepers, including women. Each beekeeper will receive training as well as a start-up kit consisting of 20 hives – initially only for subsistence purposes, but with a vision of progressing to over 50 hives, providing commercial benefits of around 360 kg of honeycomb harvested and converted to 280 kg of liquid honey. Phase two will also focus on obtaining organic certification for packaging honey in smaller bottles for export, making candles from bees wax and other cosmetics products.



Setting the tone from the top! Riaan Vermeulen, Managing Director, planting indigenous trees for National Arbor Day in the DRC.

Special Report

Kamoa-Kakula celebrates DRC's annual Arbor Day

In the DRC, the fifth of December has been dedicated to celebrating Arbor Day. This year, Kamoa-Kakula not only supported the cause, but also used the opportunity to launch their 2022-2023 reforestation campaign as part of their BMP. The aim of the reforestation campaign is to induce the restoration of gallery forests in close collaboration with the communities. The event was organized by Ben Muding, Senior Officer, Environment, and Annick Walsdorff, Senior Superintendent, Environment, and took place on December 9, 2022.

During the ceremony, five Mungaya trees were planted along the Mukanga River near the Kamoa Camp. Mungaya trees are indigenous fruit trees that were distinctly chosen for their various traditional uses, therefore contributing to maintaining the supply of ecosystem services for the benefit of the local communities.

Our Platreef Project has continued to ensure that no endangered or vulnerable species are on site through regular environmental audits as well as through the proactive implementation of the key actions contained within the site's BMP. Platreef's ESIA and associated EMP have also been fully implemented, allowing for the effective management of all biodiversity-related risks relating to erosion and invasive species as a result of mining development. Regular land management and relocation training and awareness programs at Platreef additionally allow for the effective management of these biodiversity risks.



[Video link](#)

Special Report

Ivanhoe launches its apiary program on New Horizons at Platreef

With a view to improving regional biodiversity, as well as creating community awareness and a livelihood for a passionate group of local community residents, in 2022, Ivanhoe launched an apiary program to allow for the introduction of African Honeybees into the local environment.

Cultural heritage

Cultural heritage encompasses properties and sites of archaeological, historical, cultural, artistic, and religious significance, as well as unique environmental features and cultural knowledge, and intangible forms of culture embodying traditional lifestyles, that should be preserved for current and future generations. Local regulations and international standards, such as the IFC Performance Standards (PS 8), promotes the equitable sharing of benefits from the use of cultural heritage and require companies to protect cultural heritage from adverse impacts of project activities (including support for their preservation).

Ivanhoe's impacts (and consequently, our prevention and mitigation measures) on heritage resources are informed by the ESIA processes undertaken in support of each project. Specialist heritage studies and management plans inform the Company's management of cultural heritage resources impacted by its activities, as further required by the in-country regulatory frameworks. We have also developed Chance Find Procedures for all our project sites, which provide clear guidelines regarding procedures to be followed upon discovering any unmarked and previously unidentified graves or heritage resources. All our employees and contractors working on site are sensitized in respect of these procedures, which provides for an immediate "stop work" order in the event of such discoveries.

As far as possible, we seek to preserve cultural heritage resources *in situ*, moving them only when there is no other alternative. The grave relocation process at Platreef presented an opportunity, in that ancestral graves, which were scattered across the project's proposed surface area, have now been moved to community and municipal cemeteries which are much more accessible to the next-of-kin of the deceased. In 2022, an application was submitted for the third phase of grave relocations, which is pending approval by the Mogalakwena Local Municipality.



Video link

Special Report

Bhasisa Waste Recycling Project

Striving to meet the objective of creating stakeholder wealth, as well as contributing to the circular economy, the female owned Bhasisa Waste Recycling Project, an initiative in Platreef’s ESD program, was officially handed over to its very dynamic owner, Thabita Langa, in 2022. Support provided to Thabita in 2022 included training and coaching with specific emphasis on management skills, managing business growth and finances, as well as marketing. This highly profitable small business, boasting annual revenue of ~\$130,000 and creating employment opportunities for six local community members, is now on a growth trajectory. Aiming for the stars, Thabita has enrolled at university to pursue a business qualification and continues to receive both business and academic mentoring from Platreef.

Tailings and waste management

Solid waste

A failure to adequately manage waste can result in significant negative impacts on the environment and human health, even beyond the area where waste is generated, stored or discarded. Sustainable development includes circular economy-based models, and mining presents an opportunity to integrate waste management solutions into business functioning by reducing, recovering, reusing or recycling most waste and seeking opportunities to make effective use of the waste.

We make efforts to ensure the sustainable use of resources by adopting effective waste management and circular economy methods. We are continually monitoring our waste management plans and programs to reduce our waste impact, find avenues for reuse and recycling, and meet international standards for industry best practices.

Ivanhoe Mines’ waste management programs and highlights, 2022

Waste management strategies and policies	Waste management policies, procedures and initiatives implemented across all sites.
Waste reduction strategy and plan	<p>Kamoa-Kakula: Waste reduction strategy is under development and will include a reuse, recycling and recovery process with the aim of completion in 2023.</p> <p>Platreef: Currently, the Project is ramping up with new activities and an increase in the number of people coming to site. Once the baseline is set, a waste reduction strategy will be put in place with targets.</p> <p>Kipushi: A waste reduction strategy will be developed in line with project development.</p>
Waste-related targets, programs and initiatives	<p>Kamoa: Set up a camp recyclable waste collection point, together with colour coded recycling bins and initiate waste segregation, as well as upgrade the landfill facility to implement waste segregation. Plans are underway to implement a piggery project to enhance food security and reduce food waste. Waste management awareness is included in employee and contractor induction training. A new waste facility has been established.</p> <p>Platreef: Waste volumes are measured regularly. There are procedures in place for the management of waste. The project is in development stage, targets for waste volume reduction will be set once steady-state production is attained.</p> <p>A local contractor has been employed on-site, with three sorters, to separate various waste streams for recycling. Annual recyclable waste targets are set for achievement.</p> <p>The target for the 2022 annual period is 2,000 kgs. Campaigns are conducted to promote waste separation on-site and minimization of the use of non-renewable resources.</p>
Active waste management plan	Waste management plans are implemented across all sites.
Waste inventory on site	IsoMetrix system enables an electronic waste inventory with required disposal certificates.
Regular waste audits and inspections	<p>Kamoa: Routine inspections are conducted regularly, together with annual audits that are undertaken by the environmental department of Kamoa.</p> <p>Platreef: Weekly inspections are conducted and quarterly waste management audits are undertaken as per the Environmental Management Plan.</p>
Vegetation of mining stockpiles	Topsoil stockpiles are naturally revegetated and the slope managed to avoid erosion at all sites. Regular monitoring is undertaken by the respective environmental departments. Completion of revegetation of landfill at Kamoa-Kakula.
Recycling of waste materials, such as paper, organic materials and oil	<p>Kamoa: Kamoa currently recycles oil.</p> <p>Platreef: Oil is collected for recycling. Paper is also recycled. All recyclable waste materials are recycled, calculated volume amounts are calculated and recorded.</p> <p>Kipushi: Oil, paper and scrap steel are recycled.</p>
Waste-related training programs with employees and contractors	<p>Kamoa: 4GreenDRC Company removes certain recyclable waste from site.</p> <p>Platreef: Bhasisa Recycling Program recycles waste.</p> <p>Kipushi: Classified scrap steel is recycled in Lubumbashi.</p>
Kg of waste generated in reporting year	<p>Platreef</p> <ul style="list-style-type: none"> • 8,913.9 kg paper • 63,320 kg scrap metal • 16,776 kg general waste • 12,780 kg hazardous waste
Kg waste recycled in reporting year	<p>Platreef</p> <ul style="list-style-type: none"> • 8,913.9 kg paper • 63,320 kg scrap metal

Tailings management

The mining process creates waste, including tailings, waste rock, and non-processing waste. Dealing effectively and responsibly therewith is a critical element in the design, operation, and closure planning of mines. Effectively reducing and repurposing mine waste reflects our commitment to operating sustainably.

Tailings – one of the most significant waste streams generated by the mining process – typically consist of a slurry of fine mineral particles and water which are created as mined ore is crushed, milled, and processed to separate the valuable minerals from the ore. Tailings storage facilities (TSFs) are specially engineered and designed to allow for the safe storage and management of this by-product waste material. Our mine design team continues to work closely with international experts and independent reviewers when designing TSFs for each of our projects, in line with our safe, modern and innovative approach to mine design and development. Concurrent rehabilitation by backfilling enables Ivanhoe to minimize our surface footprint, reduce closure and rehabilitation liabilities, and help support the underground mine by filling voids. Seeking to minimize our surface footprint, approximately half of the tailings from our Kamoia-Kakula and Platreef Projects will be incorporated into materials used to backfill mined-out underground stopes.



Construction of the wall raise of the Kamoia-Kakula Tailings Storage Facility.

KAMOIA-KAKULA tailings storage facility – active facility situated approximately 30 kilometers southwest of Kolwezi in the Katanga district of the DRC, situated in a valley with a large catchment upstream of the facility, on the upper reaches of the Mulungwishi River which drains westwards from the east. The areas south of the Mulungwishi River drain towards the Tchimbundji River while the northern areas drain northwest to the Lulula River. The Kamoia-Kakula TSF is designed as a downstream facility with engineered earth-fill walls. All stormwater runoff is diverted around the facility in lined trenches to ensure minimal stormwater enters the top of the facility. The facility has a penstock to decant water, thereby allowing water to be removed easily and quickly in the event of a storm event.

Potential seepage through the engineered wall is safely conveyed out the wall via a curtain-drain system. There is no critical infrastructure or housing that is or will be situated within the zone of flow.

PLATREEF tailings storage facility – facility is still in the design phase based on the new Platreef 2022 Feasibility Study; it is being designed as a dry-stack facility.

KIPUSHI tailings storage facility – facility design is being concluded following finalization of the feasibility study. The facility, designed as a downstream facility, will be situated on a gently sloping plain with all upstream stormwater runoff being diverted away from the facility. A minimum freeboard of two meters is provided for on the TSF, thus ensuring that under correct operation, the TSF cannot overtop. Potential seepage through the engineered wall will be conveyed safely out the wall via a curtain drain system.

TSFs need to be carefully monitored and maintained to ensure the stability of the dam walls and prevent dam wall failures or seepage of contaminants into the local environment. The 2020 Global Industry Standard on Tailings Management (GISTM) established the first global standard on tailings management that can be applied to existing and future TSFs. Strengthening current practices in the mining industry by integrating social, environmental, governance, local economic and technical considerations, the GISTM covers the entire TSF – from project conception, planning and design, through to operation and ongoing construction, to closure and post-closure. The GISTM encourages greater involvement by communities and stakeholders, including the world’s major investor bodies. Ivanhoe Mines intends to comply with the latest ICMM requirements for tailings management, which are set out in the GISTM, at all our sites. One of our corporate objectives for 2023 is the development of a group level GISTM-aligned policy and standard, with particular focus on compliance with human rights and social items outlined in the GISTM requirements, as well as clear lines of responsibility and accountability.

In 2022, Knight Piésold was appointed to carry out an independent third-party audit and a gap analysis of the Kamoia-Kakula TSF against the GISTM. The scope of work covered a review of the design report and any design changes, drawings, stability and capacity analyses, TSF operating manual, previous year’s TSF monitoring and surveillance records, and minutes of inspection meetings, as well as a site visit and interviews with Kamoia-Kakula’s personnel, consultants and operators. The review culminated in a GISTM gap analysis report and workshop to discuss the identified gaps and proposed actions. Knight Piésold found no serious findings in the technical review of the TSF, and while they found that there is much to do to achieve GISTM-alignment, many of the gaps are minor and can be easily addressed as actions within the coming year, or on an ongoing basis, by means of further studies, putting governance structures/systems in place, and producing dedicated community and emergency-related plans. Addressing these gaps and striving to attain GISTM alignment will be a key focus area for Kamoia-Kakula throughout 2023.

Mine Closure

The closure of mines often has significant, irreversible impacts on the environment and on host communities which have been dependent on the mine from an economic and livelihoods perspective. Mines are therefore required to plan for, manage, rehabilitate and remediate the environmental impacts from mining throughout the lifespan of their operations and at closure of the mine, as well as the residual environmental impacts that may emerge post-closure. Sustainable mine closure planning also considers the end state of the mining area, and how the mine-dependent host communities can be or become resilient and self-sustaining in a post-mining future.

Ivanhoe Mines aspires to empower its host communities and leave behind a positive legacy and environment that is healthy, flourishing and fit for meaningful use post-mining. Our approach to mine closure reflects our ambition for creating shared, long-term value. We have developed dedicated closure plans for each of our operations, and we conduct annual independent assessments of our closure liabilities to ensure adequate financial provision is secured to cover closure and rehabilitation costs.

At the end of 2022, the total amount of land disturbed and not yet rehabilitated at our mines sites was approximately 3,209 hectares. While our projects are still in their infancy, we advocate and have planned for concurrent rehabilitation strategies in recognition of the finite nature of our ore bodies. In 2022, Kamo-a-Kakula re-launched its on-site nursery, which will provide indigenous trees to support ongoing rehabilitation efforts. This project will remain a key focus area for Kamo-a-Kakula in 2023.



Arbor Day campaign at the Platreef Project in 2022. Collaboration with local stakeholders is imperative across all phases of the mining life-cycle, including mine planning, development and closure. Educational environmental initiatives such as Arbor Day tree planting campaigns serve to both conserve the environment, as well as to educate future generations, who will play an instrumental role in our closure activities.



7

KEY PERFORMANCE DATA

■ We strive to holistically achieve and balance the WEF's objectives for governance, people, prosperity, and planet and seek to transform lives, create a great place to work for our employees, bring about a positive, lasting contribution to the host communities and countries in which we operate, and minimize our environmental impact – all while generating superior long-term returns for our shareholders.

Alex Pickard, Senior Vice President, Corporate Development and Investor Relations.

Our key performance data

Our Governance

Governing Body	2022	2021	2020
Nominated Directors	11	11	11
% Independent Directors	55%	55%	55%
% Female Board of Directors	18%	18%	18%
% Female Executive Officers	20%	33%	33%
% Female Senior Management (Employees)	11%	11%	11%

Ethical Behavior

Confirmed incident of corruption	-	-	-
Monetary losses from unethical behavior	-	-	-

Stakeholder Engagement

Meetings Held	Total	605	633	772
	Kamoa-Kakula	446	479	689
	Platreef	127	132	53
	Kipushi	32	22	30
Participants engaged	Total	15,484	10,645	10,861
	Kamoa-Kakula	7,012	7,500	9,784
	Platreef	2,076	1,763	437
	Kipushi	6,396	1,382	640

Grievances

Grievances received	Total	64	56	69
	Kamoa-Kakula	50	50	66
	Platreef	7	6	3
	Kipushi	7	-	-
% grievances resolved by year-end	Total	73%	80%	78%
	Kamoa-Kakula	80%	78%	79%
	Platreef	71%	100%	67%
	Kipushi	28%	-	-

Our People

Our workforce	2022	2021	2020	
Total workforce comprised of employees and contractors	Total	14,749	12,374	8,884
	Kamoa-Kakula	11,911	10,800	7,890
	Platreef	1,413	776	238
	Kipushi	1,198	631	590
	Exploration	37	30	20
	Corporate and Group Services	190	137	146
Total employees by location	Total	4,012	2,806	2,163
	Kamoa-Kakula	3,023	1,952	1,431
	Platreef	306	246	108
	Kipushi	518	480	484
	Corporate and Group Services	165	128	140
Total contractors by location	Total	10,737	9,568	6,721
	Kamoa-Kakula	8,888	8,848	6,459
	Platreef	1,107	530	130
	Kipushi	680	151	106
	Exploration	37	30	20
Corporate and Group Services	25	9	6	
Labour relations				
Labour relations by % of workforce unionized	Total	82%	16%	34%
	Kamoa-Kakula	92%*	12%	33%
	Platreef	82%	80%	32%
	Kipushi	42%	44%	46%
	Corporate and Group Services	0%	0%	3%
Number of strikes, lockouts or protests	Total	1	-	4
	Kamoa-Kakula	1	-	2
	Platreef	-	-	2
	Kipushi	-	-	-
	Corporate and Group Services	-	-	-

* The significant increase in Kamoa-Kakula's unionized workforce is attributable to the fact that all Patterson Band A to C employees are covered by the Collective Bargaining Agreement.

Diversity, inclusion and local employment		2022	2021	2020
% female employees	Total	10%	9%	8%
	Kamoa-Kakula	6%	5%	3%
	Platreef	27%	23%	23%
	Kipushi	11%	7%	7%
	Corporate and Group Services	45%	46%	40%
% local employment	Total	97%	97%	91%
	Kamoa-Kakula	97%	97%	87%
	Platreef	100%	100%	100%
	Kipushi	97%	97%	97%
	Corporate and Group Services	96%	96%	92%
% local employees in management, where local employees are either Congolese nationals or historically disadvantaged South Africans in the DRC and RSA respectively	Total	35%	55%	58%
	Kamoa-Kakula	25%	35%	32%
	Platreef	67%	50%	42%
	Kipushi	45%	89%	90%
	Corporate and Group Services	36%	35%	42%
% employees living with disabilities	Total	0,30%	0,18%	0,25%
	Kamoa-Kakula	0,17%	0,10%	0,28%
	Platreef	1,32%	0,81%	0,93%
	Kipushi	0,58%	0,21%	-
	Corporate and Group Services	-	-	-
Performance monitoring, remuneration and retention				
% employees receiving regular performance and career development reviews	Total	17%	27%	24%
	Kamoa-Kakula	13%	16%	13%
	Platreef	39%	100%	100%
	Kipushi	8%	16%	25%
	Corporate and Group Services	80%	61%	73%

* 2021 figure restated.

Health, Safety and Well-being		2022	2021	2020
Number of patients accessing occupational health services on site	Total	21,614	16,677	16,667
	Kamoa-Kakula	19,869	13,258	13,851
	Platreef	1,416	887	111
	Kipushi	329	2,532	2,705
Number of patients tested for COVID-19	Total	13,223	14,191	1,487
	Kamoa-Kakula	2,751	6,359	1,028
	Platreef	8,984	6,413	115
	Kipushi	1,254	1,326	318
Corporate and Group Services	234	93	26	
	Total	466	869	34
	Kamoa-Kakula	297	564	21
	Platreef	148	223	5
Kipushi	16	68	-	
	Corporate and Group Services	5	14	8
	Total	29,057,652	20,310,877	14,937,236
	Kamoa-Kakula	25,205,053	18,470,385	13,172,334
Platreef	1,656,378	775,867	733,302	
	Kipushi	2,196,221	1,064,625	1,031,600
	Total	13,435,706	7,357,563	5,618,429
	Kamoa-Kakula	1,531,656	2,696,794	2,618,438
Platreef	408,360	677,450	81,298	
	Kipushi	658,142	3,983,319	2,918,693
	Total	5	10	4
	Kamoa-Kakula	4	9	2
Platreef	1	1	2	
	Kipushi	0	-	-
	Total	6	6	*
	Kamoa-Kakula	5	6	*
Platreef	-	-	*	
	Kipushi	1	-	*

* Data not available/not previously measured.

Health, Safety and Well-being		2022	2021	2020
Lost-time injury frequency rate (LTIFR)	Kamoa-Kakula	0.36	0.81	0.15
	Platreef	0.6	1.29	2.73
	Kipushi	0.46	–	–
Total recordable injury frequency rate (TRIFR)	Kamoa-Kakula	1.55	2.76	3.04
	Platreef	4.23	5,15*	6.82
	Kipushi	1.82	2.8	2
Fatalities	Total	1	1	5
	Kamoa-Kakula	1	1	2
	Platreef	–	–	3
	Kipushi	–	–	–
Number of employees (including contractor employees) participating in inductions and safety-related training interventions	Total	17,910	11,302	11,662
	Kamoa-Kakula	14,872	10,434	6,797
	Platreef	1,935	809	4,521
	Kipushi	1,103	59	344
Skills for the future				
Number of employees in programs for upgrading employee skills, including skills transfer related to succession planning	Total	587	455	190
	Kamoa-Kakula	243	229	96
	Platreef	66	196	46
	Kipushi	243	111	33
	Corporate and Group Services	35	9	15
Number of community beneficiaries in training interventions	Total	1,320	1,884	976
	Kamoa-Kakula	747	776	416
	Platreef	169	685	125
	Kipushi	404	423	435

* 2021 figure restated.

Our Prosperity

Employment and wealth generation (\$) ('000)		2022	2021	2020
Total value created and distributed	Total	2,193,688	1,254,026*	799,619
	Kamoa-Kakula	1,928,635	1,007,718	705,479
	Platreef	128,116	43,518	32,653
	Kipushi	63,659	27,593	30,801
	Exploration	12,245	19,466	5,784
Value created in the local community	Corporate and Group Services	61,033	42,904	24,902
	Total	1,685,809	907,434	547,253
	Kamoa-Kakula	1,470,529	790,451	466,535
	Platreef	124,109	43,518	32,653
	Kipushi	49,525	24,806	24,205
Total employee remuneration	Exploration	8,438	15,614	4,571
	Corporate and Group Services	33,208	33,045	19,289
	Total	95,748	84,712	36,267
	Kamoa-Kakula	65,034	56,619	18,236
	Platreef	9,673	7,954	4,214
Total socio-economic development spend	Kipushi	9,147	7,458	8,826
	Exploration	1,499	957	1,045
	Corporate and Group Services	10,395	11,724	3,946
	Total	19,659	9,500	10,943
	Kamoa-Kakula	15,106	7,510	9,486
	Platreef	2,377	1,191	715
	Kipushi	1,967	568	534
	Exploration	–	–	–
	Corporate and Group Services	209	231	208

* 2021 figure restated.

Employment and wealth generation (\$) ('000)		2022	2021	2020
Proportion of spending on local suppliers	Total	1,211,757	594,063	401,610
	Kamoa-Kakula	1,064,141	527,277	352,051
	Platreef	106,507	36,037	31,102
	Kipushi	23,971	6,627	7,428
	Exploration	6,571	13,950	3,195
Total royalties and tax paid	Corporate and Group Services	10,567	10,172	7,834
	Total	311,022	169,668	77,957
	Kamoa-Kakula	282,964	154,084	66,707
	Platreef	4,495	(2,036)	(2,809)
	Kipushi	11,169	6,024	6,475
Number of enterprises and suppliers in support and/or training interventions	Exploration	368	704	198
	Corporate and Group Services	12,026	10,892	7,386
	Total	384	115	73
	Kamoa-Kakula	100	34	21
	Platreef	284	78	52
Number of opportunities ring-fenced for local community suppliers	Kipushi	-	3	-
	Total	19	22	22
	Kamoa-Kakula	8	7	8
	Platreef	11	10	10
	Kipushi	-	5	4

Our Planet

Environmental Compliance		2022	2021	2020
Number of environmental spills	Total	1	5	2
	Kamoa-Kakula	1	4	2
	Platreef	-	1	-
	Kipushi	-	-	-
Environmental fines and sanctions (number and monetary value in \$'000)	Total	-	-	3
	Kamoa-Kakula	-	-	-
	Platreef	-	-	-
	Kipushi	-	-	3
		-	-	1,090
Water management (MI)				
Water withdrawal	Total	66,326	43,196	23,558
	Kamoa-Kakula	63,296	32,554	338
	Platreef	232	207	193
	Kipushi	2,798	10,435	23,027
Water discharged	Total	70,139	48,990	36,293
	Kamoa-Kakula	56,055	32,263	18,622
	Platreef	203	191	-
	Kipushi	13,881	16,536	17,671
Water consumption	Total	(3,812)	(5,794)	(12,734)
	Kamoa-Kakula	7,241	291	(18,284)
	Platreef	29	16	193
	Kipushi	(11,082)	(6,101)	5,357

Energy (MWh)		2022	2021	2020
Total energy consumption from grid and non-renewable fuels	Total	719,264	711,385	104,748
	Kamoa-Kakula	655,623	281,089	33,694
	Platreef	11,824	287,973	6,568
	Kipushi	51,817	142,323	64,522
Total energy grid consumption	Total	557,797	270,024	65,901
	Kamoa-Kakula	500,226	214,602	2,206
	Platreef	9,169	2,987	6,010
	Kipushi	48,402	52,435	57,685
Energy from renewable grid	Total	548,628	267,037	59,891
	Kamoa-Kakula	500,226	214,602	2,206
	Platreef	-	-	-
	Kipushi	48,402	52,435	57,685
Energy from non-renewable grid	Total	9,169	2,987	6,010
	Kamoa-Kakula	-	-	-
	Platreef	9,169	2,987	6,010
	Kipushi	-	-	-
Energy from non-renewable fuels	Total	161,467	436,111	38,883
	Kamoa-Kakula	155,397	66,487	31,488
	Platreef	2,655	284,986	558
	Kipushi	3,415	84,638	6,837

GHG Mitigation (tCO ₂ e)		2022	2021	2020
Total GHG Emissions	Total	67,042	106,796	34,194
	Kamoa-Kakula	52,661	19,725	22,764
	Platreef	10,706	67,276	8,047
	Kipushi	1,288	19,751	3,383
	Corporate and Group Services	2,387	44	*
Direct GHG Emissions (Scope 1)	Total	51,598	100,806	11,427
	Kamoa-Kakula	49,637	17,634	9,368
	Platreef	775	63,934	164
	Kipushi	972	19,198	1,895
	Corporate and Group Services	214	40	*
Indirect GHG Emissions (Scope 2)	Total	9,810	2,927	5,971
	Kamoa-Kakula	-	-	9
	Platreef	9,810	2,927	5,731
	Kipushi	-	-	231
Scope 3 (estimate)	Total	5,634	3,063	16,796
	Kamoa-Kakula	3,024	2,091	13,388
	Platreef	120	415	2,151
	Kipushi	317	553	1,257
	Corporate and Group Services	2,173	4	*

* Data not available/not previously measured.



8

APPENDICES

■ We thank all involved in the production of this 2022 Sustainability Report, including our local stakeholders for sharing their stories with our broader stakeholder audience, as well as everyone who has taken the time to read and experience our report.

Diyoka Mande Richards, Warehouse Supervisor, Kamoja-Kakula Copper Complex.

Abbreviations

4IR	Fourth Industrial Revolution
AIF	Annual Information Forum
B-BBEE	Broad-based black economic empowerment
BMP	Biodiversity Management Plan
CapEx	Capital expenditure
CDP	Carbon Disclosure Project
COVID-19	Novel Coronavirus 19
CNPR	Protection Against Ionizing Radiation
DBF	Direct-to-blister flash furnace
DRC	Democratic Republic of Congo
DMRE	Department of Mineral Resources and Energy
E&S	Environmental and Social
ECD	Early Childhood Development
EKN	Swedish Export Credit Agency
EMP	Environmental Management Plan
ESD	Enterprise and supplier development
ESG	Environmental, social and governance
ESIA	Environmental and Social Impact Assessment
ESMPs	Environmental and Social Management Plans
GHG	Greenhouse gas
GIIP	Good International Industry Practice
GISTM	Global Industry Standard on Tailings Management
GRI	Global Reporting Initiative
HIV	Human immunodeficiency virus
IAP2	International Association for Public Participation
ICMM	International Council of Mining and Metals
ICT	Information and Communications Technology
IDP	Individual Development Plans
IFC	International Finance Corporation Council

ISO	International Organization for Standardization
KPIs	Key performance indicators
LADAR	Land access, displacement and resettlement
LRP	Livelihood Restoration Plan
LPRM	Local Procurement Reporting Mechanism
LTIFR	Lost-time injury frequency rate
MD&A	Management Discussion and Analysis
MLM	Mogalakwena Local Municipality
MVA	Megavolt-ampere
MW	Megawatt
MWh	Megawatt hour
OECD	Organisation for Economic Co-operation and Development
OHL	Overhead line
OpEx	Operational expenditure
PAPs	Project-affected person
PDP	Phased Development Plan
PGMs	Platinum group metals
PPE	Personal protective equipment
PS	Performance Standard
Q	Quarter
RAP	Resettlement Action Plan
RSA	Republic of South Africa
SBSA	Standard Bank of South Africa
SEDAR	System for Electronic Document Analysis and Retrieval
SEK	Swedish Export Credit Corporation
SDG	Sustainable Development Goal
SLAs	Service level agreements
SLP	Social and Labour Plan

SMME	Small, medium and micro enterprise
SNEL	Société Nationale d'Électricité
SROI	Social Return on Investment
TCFD	Task Force for Climate-related Financial Disclosure
TRIFR	Total recordable injury frequency rate
TSF	Tailing storage facility
UN	United Nations
UNGC	United Nations Global Compact
UNGP	United Nations Guiding Principles on Business and Human Rights
WASH	Water, sanitation and hygiene
WEF	World Economic Forum
WEF SCM	World Economic Forum Stakeholder Capitalism Metrics
WWTW	Waste Water Treatment Works

Glossary

2030 Agenda	2030 Agenda for Sustainable Development
Board	Board of Directors
Code	Ivanhoe Mines Ltd.'s Our Code of Business Conduct and Ethics
Company	Ivanhoe Mines Ltd.
Crystal River	Crystal River Global Limited
Gecamines	Gecamines SA (Democratic Republic of Congo) state-owned mining company
Ivanhoe	Ivanhoe Mines Ltd.
Ivanhoe Mines	Ivanhoe Mines Ltd.
Zijin	Zijin Mining Group Co. Ltd.
Zijin Mining	Zijin Mining Group Co. Ltd.

Forward-looking statements

Certain statements in this Sustainability Report constitute “forward-looking statements” or “forward-looking information” within the meaning of applicable securities laws. Such statements and information involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements of the Company, its projects, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. Such statements can be identified by the use of words such as “may”, “would”, “could”, “will”, “intend”, “expect”, “believe”, “plan”, “anticipate”, “estimate”, “scheduled”, “forecast”, “predict” and other similar terminology, or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved.

These statements reflect the Company’s current expectations regarding future events, performance and results and speak only as of the date of this Sustainability Report. Such statements include, without limitation: (i) statements regarding Ivanhoe Mines operating and developing world-class mines, which create value for shareholders by earning profit, and creating value for society; (ii) statements regarding ongoing Phase 3 expansions at Kamoakakula which will soon place it as one of the largest copper complexes in the world; (iii) statements regarding Platreef being a multi-generational palladium-rhodium-nickel-platinum-copper-gold project; (iv) statements regarding the Platreef Project’s high grade, thick “Flatreef” deposit which is expected to become one of the world’s largest PGM mines via phased expansions; (v) statements regarding first production at Platreef being expected in late 2024; (vi) statements regarding the restart of the Kipushi Mine being expected to take place in late 2024, and that mining will be performed using highly productive, mechanized methods and cemented rock fill will be utilized to fill open stopes; (vii) statements that Kipushi is expected to be the world’s highest grade zinc mine once in production; (viii) statements regarding Kamoakakula’s Integrated Development Plan (IDP) 2023 projecting a staged increase in nameplate production up to a total of 19.2 Mtpa over a 33-year mine life; (ix) statements regarding the expected increase in processing capacity resulting from the de-bottlenecking project to 9.2 million tonnes of ore per year; (x) statements regarding copper production from the Kamoakakula Copper Complex’s Phase 3 projected to commence in 2023 for Kamoakakula 1 and in 2025 for Kamoakakula 2; (xi) statements regarding processing capacity of more than 14 million tonnes per annum (Mtpa) following the

commissioning of Kamoakakula’s Phase 3, expected by the end of 2024; (xii) statements regarding the design of Kamoakakula’s direct-to-blister flash smelter, that it is designed to meet the International Finance Corporation’s emission standards, and that the high-strength sulphuric acid produced by the smelter would be sold in the domestic DRC market; (xiii), statements regarding Kamoakakula’s Phase 3 expansion being powered by 178MW of clean, renewable hydro-generated electricity following the refurbishment of Turbine #5 at the Inga II dam, which is scheduled for completion in Q4 2024; (xiv) statements that approximately half of Kamoakakula’s tailings will be pumped back underground; (xv) statements regarding the development of the x-ray facility and trauma theatre unit at the Kamoakakula hospital being expected to be ready in 2023; (xvi) statements regarding the expected launch of the Kamoakakula Centre of Excellence in Q4 2023, and that it will create a sustainable and community-focused higher learning environment; (xvii) statements regarding first concentrate production for Platreef’s Phase 1 being planned for Q3 2024 and Platreef’s Phase 2 expansion being based on the commissioning of Shaft 2 in 2027; (xviii) statements regarding the completion of a reduction strategy that includes a reuse, recycle and recovery process at Kamoakakula, which is aimed for completion in 2023; (xix) statements regarding the commissioning of two 2.2 Mtpa concentrators at Platreef in 2028 and 2029, thereby increasing the steady-state production to 5.2 Mtpa by using Shaft 2 as the primary production shaft; (xx) statements that life-of-mine cash cost would rank Platreef as the industry’s lowest cost primary PGM producer; (xxi) statements regarding the supply of treated bulk water for Platreef’s phased development plan, and construction of the Masodi Wastewater Treatment Works plant being scheduled for completion in mid-2023; (xxii) statements regarding construction of Platreef’s first solar-power plant and commissioning being planned for 2023; (xxiii) statements regarding Platreef’s Phase 2 production; (xxiv) statements regarding Platreef’s mineral resource base of 95 Moz 3PE+Au, plus 2.7 Mt of nickel making it the largest precious metals project under development by far; (xxv) statements regarding power generated from Platreef’s solar-power plant, including that it will supply clean, solar-generated electricity to the mine; (xxvi) statements regarding implementation of the Platreef Project’s second Social and Labour Plan (SLP); (xxvii) statements regarding the new agreement signed between Kipushi Holding and Gécamines to return the ultra-high-grade Kipushi Mine

back to commercial production; (xxviii) statements regarding the planned resumption of commercial production at Kipushi based on a two year construction timeline; (xxix) statements regarding Kipushi being the world’s highest-grade major zinc mine, with an average grade of 36.4% zinc, over the first five years of production; (xxx) statements regarding the independent feasibility study for the planned resumption of commercial production at Kipushi, with an increased resource base compared to the pre- feasibility study, extending the mine life to 14 years; (xxxi) statements regarding Kipushi being expected to rank in the second quartile of the cash cost curve for zinc producers globally; (xxxii) statements regarding the estimated net present value, internal rate of return and expected steady-state production of the Kamoakakula Copper Complex, Platreef Project and/ or Kipushi Project; (xxxiii) statements regarding future mine production at the Kipushi Project including life-of-mine average annual zinc production of 240,000 tonnes with a zinc grade of 32%; (xxxiv) statements regarding the availability and development of water and electricity projects for the Kamoakakula Copper Complex, Kipushi Project and Platreef Project; (xxxv) statements regarding the commencement of development and/or mining operations at any Project, including the timing of any such commencement; (xxxvi) statements regarding metallurgical testwork, concentrator design, proposed mining plans and methods, mine production rates, mine life, metal recoveries and future estimated cash flow at the Kamoakakula Copper Complex, Platreef Project and Kipushi Project; (xxxvii) statements regarding the planned amount and timing, as well as the degree of success of, any future exploration program (including in the Western Foreland Exploration Project), including drilling programs, the potential addition of Mineral Resources and the potential to upgrade exploration targets to Mineral Resources as a result of such exploration and drilling programs; (xxxviii) statements regarding the prospective receipt of permits, licences or approvals at any Project, including those necessary to commence development or mining operations; (xxxix) statements regarding expected activities or results of exploration, development or mining operations at any Project; (xl) statements regarding aspirational groupwide targets for gender inclusion across all levels of the organization; (xli) statements that the future expansion of the Kamoakakula Copper Complex will be powered by clean, renewable hydro-generated electricity which is developed in partnership with the DRC’s state owned power company,

SNEL; (xlii) statements regarding the completion of broad-based stakeholder human rights impact assessment training planned for the first half of 2023 and the completion of supplier due diligence toolkits in the first half of 2023; (xliii) statements regarding the implementation of ISO27001 accreditation in 2023; (xliv) statements regarding the planning of the second phase of the livelihood restoration plan for the Platreef Project in 2023; (xlv) statements that in 2023 the company intends to work towards a group-wide decarbonization strategy and roadmap to strive towards net zero; and (xlvi) statements regarding the assurance of data in the Company's 2023 Sustainability Report.

Furthermore, with respect to this specific forward-looking information concerning the operation and development of the Kamoa-Kakula, Platreef and Kipushi projects, the Company has based its assumptions and analysis on certain factors that are inherently uncertain. Uncertainties include: (i) the adequacy of infrastructure; (ii) geological characteristics; (iii) metallurgical characteristics of the mineralization; (iv) the ability to develop adequate processing capacity; (v) the price of copper, nickel, zinc, platinum, palladium, rhodium and gold; (vi) the availability of equipment and facilities necessary to complete development; (vii) the cost of consumables and mining and processing equipment; (viii) unforeseen technological and engineering problems; (ix) accidents or acts of sabotage or terrorism; (x) currency fluctuations; (xi) changes in regulations; (xii) the compliance by joint venture partners with terms of agreements; (xiii) the availability and productivity of skilled labour; (xiv) the regulation of the mining industry by various governmental agencies; (xv) the ability to raise sufficient capital to develop such projects; (xvi) changes in project scope or design; (xvii) recoveries, mining rates and grade; (xviii) political factors; (xviii) water inflow into the mine and its potential effect on mining

operations, and (xix) the consistency and availability of electric power.

Forward-looking statements and information involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indicators of whether or not such results will be achieved. A number of factors could cause actual results to differ materially from the results discussed in the forward-looking statements or information, including, but not limited to, the factors in the Company's Annual Information Form and MD&A available at www.sedar.com, as well as unexpected changes in laws, rules or regulations, or their enforcement by applicable authorities; the failure of parties to contracts with the Company to perform as agreed; social or labour unrest; changes in commodity prices; and the failure of exploration programs or studies to deliver anticipated results or results that would justify and support continued exploration, studies, development or operations.

Although the forward-looking statements contained in this Sustainability Report are based upon what management of the Company believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with these forward-looking statements. These forward-looking statements are made as of the date of this Sustainability Report and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this Sustainability Report.

The Company's actual results could differ materially from those anticipated in these forward-looking statements as a result of the factors set forth in the Company's Annual Information Form and MD&A available at www.sedar.com.

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We encourage all stakeholders to share their views on our sustainability performance and reporting. Your opinion matters. Please share your views with us.



Children at the Early Childhood Development (ECD) Centre in the community of Muvunda near the Kamo-Kakula Copper Complex receiving uniforms and school bags on opening day.



“Access to quality education empowers societies by driving long-term economic growth, spurring innovation, strengthening institutions, and fostering social cohesion. One of the best investments that we can make to ensure the future success of our communities is through early childhood development. We are excited by the launch of our first Early Childhood Development Centres near our Kamo-Kakula Copper Complex in 2022, expanding the reach of our educational initiatives to lay the building blocks for academic success in our local communities from a young age.”

DR PATRICIA MAKHESHA
Executive Vice-President,
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