

# LETTER FROM THE CHIEF EXECUTIVE OFFICER



**Tristan Pascall**Chief Executive Officer

I am pleased to present our ESG report for 2021, which sets out our performance in environmental, health & safety, social and governance areas. This year's report, our fifth setting out our performance, builds on our commitment to the ongoing development of our sustainability reporting and increased transparency to our stakeholders.

#### **HEALTH & SAFETY**

The health and safety of the Company's employees and contractors are of utmost importance to us. Tragically, in June 2021, a road traffic incident occurred which resulted in the loss of a life at our Kansanshi mine. This incident has been subject to thorough internal and external investigation, and the learnings have been shared through the Company. The incident underlines the critical importance of our continued focus on health and safety at all of our operations.

#### **CLIMATE CHANGE**

We published our inaugural Climate Change Report earlier this year, aligned to Taskforce on Climate-Related Financial Disclosures recommendations. This report sets out our greenhouse gas emissions reductions targets for 2025 and 2030. The recently announced 430MW wind and solar project in Zambia will allow us to further increase the proportion of renewable power used by our Zambian operations, which is currently 85% renewable. As we seek to lower the GHG emissions intensity of our

metal production, we have implemented internal carbon pricing in our evaluation of new projects.

#### **INNOVATION**

Our results-driven culture means continual focus on cost and production efficiencies, whilst realising real sustainability benefits. We see the delivery of innovation projects as crucial to optimising the use of key resources by our operations, as we have done with Trolley Assist, which we have spent ten years developing with equipment manufacturers. The technology lowers diesel consumption and increases productivity with a reduced GHG emissions profile while also delivering cost savings. We now operate the world's largest ultraclass fleet operating on Trolley Assist at Cobre Panama with plans to expand its use across our major operations.

#### **SOCIAL INFRASTRUCTURE**

We continue to invest in our people and have recently approved the construction of additional and improved accommodation in Kalumbila and in Panama that will serve our workforces at the Sentinel and Cobre Panama mines. Furthermore, our ongoing contributions to the host communities around our mines seek to ensure our operations have a positive impact on those around us, including improvements to local infrastructure. These efforts build upon previous projects such as the construction of schools, health facilities, water pipelines, bridges, roads and airports, underlining our ongoing commitment to support our communities in Zambia, Panama and Mauritania.

#### **RESPONSIBLE GROWTH**

The metals that we mine are essential to the global transition to a low carbon economy. With the demand for copper and nickel required for electric vehicles and renewable energy infrastructure expected to significantly increase within this decade and the challenges associated with commissioning new mines, First Quantum's responsible approach to mining will be key.

We are committed to extracting resources responsibly and the importance that we place on environmental and social sustainability is an intrinsic part of everything we do. First Quantum has more than doubled copper production in the last ten years. We see that disciplined growth in the production of copper and nickel will enable decarbonisation and drive socioeconomic development.

As we continue to grow towards 1 000 000 tonnes of annual copper production, our people and our host communities remain key to our success. We strive for ongoing excellence in our delivery of projects and the operation of our mines with social responsibility and sustainability at the heart of our business.



# SUSTAINABILITY 2021 PERFORMANCE HIGHLIGHTS



SCOPE 1 & 2 EMISSIONS



73% WATER REUSE 6% INCREASE ON 2020

**©0.5%** 

OPERATIONS IN HIGH WATER STRESS AREAS

WATER USE PER TON ORE MILLED

**♥5%** 



94%

WORKFORCE NATIONALS

\$2 BILLION+

SPENT WITH NATIONAL REGISTERED SUPPLIERS

\$31 MILLION

**CSR SPEND** 



**CARBON PRICE** 

FOR NEW PROJECTS ESTABLISHED

HUMAN RIGHTS FAILURES



\$1.6

ECONOMIC CONTRIBUTIONS (TAXES, ROYALTIES)

2/3
WORKFORCE

COVERED BY COLLECTIVE BARGAINING AGREEMENTS



809

PURCHASED **ENERGY RENEWABLE** 

**GHG EMISSIONS REDUCTION TARGETS** 

**©30%** 

2025

**♥50%** 

2030

4.8t

CO<sub>2</sub>e/ T Cu-eq GHG INTENSITY

SCOPE 1 & 2 EMISSIONS



5%
IN COPPER PRODUCTION

**532%**IN NICKEL PRODUCTION

**11%**IN ENERGY CONSUMPTION

**30%** 



\$7.2
BILLION

TOTAL REVENUE



11% WORKFORCE FEMALE

98%
WORKFORCE

TRAINING COMPLETION CODE OF CONDUCT









#### **COBRE PANAMA** Ownership 90% Primary Copper Gold, molybdenum, silver

2021 Production Copper 331kt, Gold 142koz

## 816 435 **TONNES**

Secondary

2021 COPPER PRODUCTION

# 16 818 **TONNES**

2021 NICKEL PRODUCTION

PRINCIPAL PRODUCTS

# COPPER, NICKEL AND GOLD

SALES REVENUES

**\$7 212** MILLION

EMPLOYEES

17 845

**8 404 CONTRACTORS** 

Operating Sites

Development Projects

**HAQUIRA** 

#### **COBRE LAS CRUCES**

100%

Ownership

Primary Copper

2021 Production Copper 14kt

LAS CRUCES UNDERGROUND

#### **GUELB MOGHREIN**

TACA TACA

	Ownership	100%
	Primary	Copper
	Secondary	Gold
	2021 Production	Copper 19kt, Gold 38kd

SENTINEL

**ENTERPRISE** 

North Western	TOVITICE, Zurribiu
Ownership	100%
Primary	Copper
2021 Production	Copper 233kt

**PYHÄSALMI** 

100%

2021 Production Copper 3kt

Copper

Pyrite, Zinc

Ownership

Secondary

Primary

CAYELI

100% Ownership Primary Copper Zinc Secondary

2021 Production Copper 15kt

KANSANSHI

Secondary

North-Western Province, Zambia Ownership 80% Primary Copper

Gold

2021 Production Copper 202kt, Gold 128koz

**RAVENSTHORPE** 

70% Primary Nickel Cobalt Secondary

2021 Production Nickel 17kt



# **SUSTAINABILITY STRATEGY**

At First Quantum, we are committed to extracting resources responsibly and sustainability is core to everything we do as we seek to mine in the most responsible manner achievable.

We are committed to develop, design and operate our sites in an environmentally sensitive manner and where reasonably possible, positive benefits to local biodiversity, protection of water resources and the efficient use of energy and other resources. Most importantly, we want to ensure the communities in which we operate, and which play such an important role in our success, become increasingly self-reliant and feel empowered to pursue a more rewarding way of life - today and for generations to come.

\*All relevant policies and Environmental, Social & Governance ("ESG") reporting can be found at www.first-quantum.com

OUR APPROACH TO SUSTAINABILITY IS FOUNDED ON FOUR KEY PILLARS:



**ECONOMICALLY** VIABLE **INVESTMENTS** 



**TECHNICALLY APPROPRIATE OPERATIONS** 



**ENVIRONMENTALLY SOUND PRACTICES** 



**SOCIALLY RESPONSIBLE ACTIONS** 

We believe that our responsible approach to mining is fundamental to achieving the responsible growth in copper production that is essential to meet the challenges of the 21st century. First Quantum seeks to be the partner of choice for new mining projects. We remain committed to the continuous improvement of our approach to responsible mining by ensuring that each new mining project meets increasing environmental and social performance.

To deliver on our social responsibility strategy, we have established a number of policies, practices, management systems and reporting commitments, including:

- · Transparency and continuous development of our ESG reporting, aligned to appropriate frameworks, including the Global Reporting Initiative (GRI), United Nations Sustainable Development Goals (UN SDGs), Sustainability Accounting Standards Board (SASB) and the Taskforce on Climate-related Financial Disclosures (TCFD) recommendations;
- Comprehensive Code of Conduct, which applies to all permanent employees, contractors (including security contractors) and suppliers;

- · Integration of ESG factors, including safety metrics, into executive compensation;
- Grievance mechanisms and procedures at every operation;
- · Environmental management system based on the ISO 14001:2015 standard at all operations:
- Health and safety management system based on the ISO45001:2018 standard at all operations;
- Innovation in mining, working in collaboration with equipment manufacturers to deliver benefits in productivity and profitability as well as incremental greenhouse gas (GHG) emissions reductions and health & safety improvements.

In keeping with our commitment to sustainable development at our operations, we seek to leave a place better than we found it, through greater protection of biodiversity, a responsible approach to climate change, enhanced public infrastructure and improved education and health care.



# INNOVATION **DRIVING SUSTAINABILITY**

Innovation in mining is integral to First Quantum's philosophy. We have an established practice of working in collaboration with equipment manufacturers to deliver benefits in productivity and profitability as well as incremental GHG emissions reductions and health & safety improvements.

Our successful implementation of new technologies in mining, crushing, processing, water management and concentrate grade improvements across our operations have come about from this approach.

#### **ONGOING INNOVATION PROJECTS INCLUDE:**



**Expansion of the use of trolley assist at Cobre Panama and Sentinel** 



**Processing improvement to further** increase concentrate grade at Cobre **Panama** 



**Expansion of the Cobre Panama** ultraclass fleet as part of CP100 expansion to deliver additional copper production



4th in-pit crusher at Sentinel



**Upgrades to water treatment facilities** at Sentinel to reduce water consumption and reduce costs



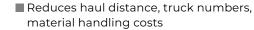
Milling circuit trials to reduce power consumption

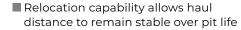


Rolling resistance to reduce tyre wear, improve safety and decrease diesel consumption

#### **ONGOING MINING INNOVATION**

#### **IN-PIT PRIMARY CRUSHING AND CONVEYING**





■ Lowers CO<sub>2</sub>e intensity

#### **ROLLING RESISTANCE**

■ Road treatment consisting of a rock chip seal covered with a slurry seal (i.e. tar road). This improves rolling resistance thereby reducing diesel consumption and emissions.



#### **COMMINUTION OPTIMISATION**

■ Large comminution circuits and smart thinking in equipment layouts ensures process flexibility, improved productivity and lower energy intensity

#### **ISACONVERT**

- Pioneering technology built and commissioned at Kansanshi Smelter as a commercial-scale pilot
- Reduced emissions compared to conventional batch Peirce-Smith converters while improving costs and reducing environmental impact



Our proprietary artificial intelligence tool aims to track blasting material to reduce grade dilution and drive

#### **IMPROVED CONCENTRATE GRADES**

- Two Jameson cells were installed in the Kansanshi sulphide circuit in June 2017
- Jameson cells have since been installed at Sentinel and Cobre Panama
- In 2020 one of the Kansanshi units was converted to a Concorde cell. The higher recoveries improve the overall productivity, and energy intensity of operations.

#### **TROLLEY ASSIST**

- Pioneering electrical drive technology on pit exit ramps
- Lowers operational cost through reduced diesel consumption and maintenance savings.
- Increases speed and productivity

#### **IMPROVED GOLD RECOVERY**

- Pioneering technology in copper mines using gravity gold recovery to augment gold premiums in copper concentrate streams
- Improves the overall productivity of the mine and energy intensity of operations

#### **KANSANSHI HIGH** PRESSURE ACID LEACH

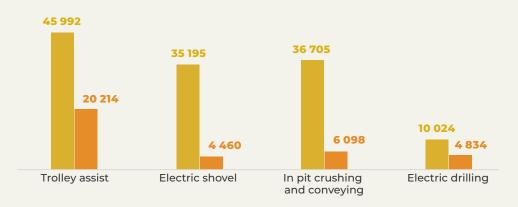
■ The Kansanshi High Pressure Leach is among the few copper autoclaves operating in the world today. Treatment of copper concentrates resulting in less trucking and associated costs.

# 1.1 MILLION 100 000

THROUGH THE OPERATION OF THE **KANSANSHI SMELTER** 

TONNES OF CO2e SAVED ANNUALLY WITH THE IMPLEMENTATION OF PIT ELECTRIFICATION TECHNOLOGY **IN ZAMBIA** 

#### ESTIMATED ANNUAL CO2e (TONNE) EMISSIONS WITH MINING **EFFICIENCIES COMPARED TO CONVENTIONAL MINING PRACTICES**



**KEY** ● CO<sub>2</sub>e Conventional ● CO<sub>2</sub>e Efficiencies

#### ESTIMATED ANNUAL AVOIDED CO2e EMISSIONS FROM THE **KANSANSHI SMELTER (TONNE)**



**KEY** ● Sulphur (Scope 3) ● Logistics (Scope 3) ● Smelting (Scope 2 and scope 3)

efficient utilization of resources.



# RESPONSIBLE MINING AND THE ENERGY TRANSITION

# OUR PRIMARY PRODUCT, COPPER, IS FUNDAMENTAL FOR ENERGY EFFICIENCY, SECURITY AND CLIMATE CHANGE MITIGATION.

With copper being a catalyst to the global transition to a low carbon economy and a key driver for the socioeconomic progression of developing economies, the positive impact of the copper mining sector will be significant to the achievement of the United Nations Sustainable Development Goals (UN SDGs). The renewable energy and electric vehicle transition is expected to drive an increase in the demand for copper as the electrical infrastructure requirements to drive the necessary changes to the global energy markets are significant.

# THE GLOBAL TRANSITION TO A LOW CARBON ECONOMY REPRESENTS A FUNDAMENTAL SHIFT IN THE MATERIALS REQUIRED FOR ENERGY GENERATION, MOVING AWAY FROM FUEL TO MINERALS.

The pace of development for the new supply of transition minerals, in particular copper, represents a very significant challenge for the global mining industry, and the world. The important role that emerging economies have to play in the production of the metals essential to the low carbon transition, such as copper, means that responsible mining can be a key driver of economic development through increased government revenues, employment opportunities, infrastructure development and investment, and the transfer of knowledge and technology to host governments and communities.

# THE WORLD WILL NEED MORE COPPER AND AT FIRST QUANTUM, WITH OUR EXTENSIVE EXPERIENCE IN EXECUTING AND DELIVERING MAJOR COPPER PROJECTS, WE WANT TO BE THE PARTNER OF CHOICE TO DEVELOP NEW MINES.

In the last ten years, we have more than doubled our copper production to more than 800 000 tonnes per year driven by the development and commissioning of the Sentinel copper mine in 2017, and more recently the Cobre Panama mine in 2019. In the near future our growth will continue in a disciplined manner, focused on brownfield and greenfield growth. As the world's 6th largest producer with one of the largest copper resources, First Quantum is well placed to support the transition to a low carbon economy through our responsible approach to mining and our emphasis on UN SDGs.

Growth in copper production remains important to First Quantum even as we seek to reduce the intensity of our environmental and climate impact. We believe that responsible growth is achievable by ensuring that our projects meet higher hurdles for environmental and climate impact into the future. For this reason, First Quantum has implemented a carbon price for the evaluation of new projects.



# **16 YEARS**

AVERAGE TIME TO FROM **DISCOVERY TO COMMISSIONING** FOR NEW COPPER MINES\*

WHITE HOUSE TARGET OF\*\*

**50**%

OF **ANNUAL US CAR SALES**TO BE **EV BY 2030** WILL REQUIRE
AN ESTIMATED ADDITIONAL

230 OOC

= 2021
SENTINEL MINE COPPER
PRODUCTION EVERY YEAR

**5450 ™** 

OPERATIONAL WATER CONSUMPTION



**34 038**<sub>M</sub>

WORKFORCE



<sup>\*</sup> https://www.iea.org/reports/the-role-of-criticalminerals-in-clean-energy-transitions

<sup>\*\*</sup> https://www.whitehouse.gov/briefing-room/ statements-releases/2021/08/05/fact-sheet-presidentbiden-announces-steps-to-drive-americanleadership-forward-on-clean-cars-and-trucks/



# **INTRODUCTION - REPORTING FRAMEWORKS**

At First Quantum Minerals Ltd (FQM), we are committed to extracting resources responsibly and our sustainability strategy is an intrinsic part of everything we do. The Company has adopted a cautionary approach in all of its business activities due to the risks and potential impacts associated with developing and operating large mines.

As a responsible miner, we recognise our obligation to identify, assess and report on our performance. This report presents our environmental, safety and social performance from January 2021 to December 2021. In addition to the data presented for the 2021 calendar year, some historic data has been restated. The Company will restate data when more accurate figures are available, such as the publication of updated coefficients used in the calculation of emissions figures or updated methodologies to improve accuracy.

As in previous reports, data is presented at both a site and group level. We believe that this level of detail provides greater context to our overall performance and longer-term trends. This ESG Report aims to:

- · Address stakeholder's requirements;
- · Provide detail and context on the Company's environmental performance and/or other social or governmental practices; and
- · Communicate transparently the consistent application of our sustainability strategies.

This ESG Report has been reviewed and approved by the Company's Board of Directors.

#### **ABBREVIATIONS AND ACRONYMS**

- KT (kilotonne) A thousand (10<sup>3</sup>) tonne;
- MT (megatonne) A million (106) tonne;
- ML (megalitre) A million (106) litres;
- GJ (gigajoule) A billion (109) joules;
- TJ (terajoule) A million million (1012) joules;
- **Ha** hectare;

#### (copper equivalent)

A measure to normalize the production of several mined commodities into a single 'copper-equivalent' figure. To calculate a copper equivalent, commodities are scaled by the number of equivalent units of copper they represent in value. Relative commodity prices are averaged over the reporting period;

CO<sub>2</sub>e

#### (carbon dioxide equivalent)

A measure to normalize the impact of different GHGs in terms of the amount of CO. that would create the same amount of warming.

In an effort to standardized our approach to sustainability reporting and improve transparency. First Quantum's **ESG report disclosures have** been prepared in accordance with the following standards:

#### **GLOBAL REPORTING INITIATIVES (GRI)**

Where data conforms to the requirements of the GRI, the relevant code has been referenced. A summary of the GRI disclosures listed in this report are as follows:

**102**: General disclosures

203: Indirect Economic Impacts

**204**: Procurement practices

**302** : Energy

**303**: Water and effluents

**304**: Biodiversity

**305**: Emissions

**306**: Effluents and waste

**403**: Occupational health and safety

**404**: Training and Education

**405**: Diversity and Equal Opportunity

408: Child Labour

409: Forced or Compulsory Labor

410 : Security Practices

**411** : Rights of Indigenous Peoples

413 : Local Communities

A separate Content Index Report is available. The Content Index Report can be found on page 48

#### **SUSTAINABILITY ACCOUNTING** STANDARDS BOARD (SASB)

Included in the content index on Page 48 of this report are references to the SASB Metals and Mining disclosures which are as follows:

#### EM-MM-110a.1.

Gross global Scope 1 emissions, percentage covered under emissionslimiting regulations

#### EM-MM-110a.2.

Discussion of long-term and shortterm strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets

#### EM-MM-120a.1.

Air emissions of the following pollutants: (1) CO, (2) NO, (excluding  $N_2O$ ), (3)  $SO_3$ , (4) particulate matter (PM10), (5) mercury (Hg), (6) lead (Pb), and (7) volatile organic compounds (VOCs)

#### EM-MM-130a.1.

(1) Total energy consumed,

(2) percentage grid electricity,

(3) percentage renewable

#### EM-MM-140a.1.

(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress

#### EM-MM-150a.4.

Total weight of non-mineral waste generated

#### EM-MM-150a.5

Total weight of tailings produced

#### EM-MM-150a.6.

Total weight of waste rock generated

#### EM-MM-150a.7.

Total weight of hazardous waste generated

#### EM-MM-150a.8.

Total weight of hazardous waste recycled

#### EM-MM-160a.1.

Description of environmental management policies and practices for active sites

#### EM-MM-210a.3.

Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict

#### EM-MM-210b.1

Discussion of process to manage risks and opportunities associated with community rights and interests

#### EM-MM-310a.1

Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees

#### EM-MM-320a.1

1) MSHA all-incidence rate, (2) fatality rate, (3) near miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees

#### EM-MM-510a.1

Description of the management system for prevention of corruption and bribery throughout the value chain.

#### EM-MM-540a.2.

Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities

#### EM-MM-540a.3

Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities

#### EM-MM-000.A

Production of (1) metal ores and (2) finished metal products

#### EM-MM-000.B

Total number of employees, percentage contractors

#### **UN SDG'S**

The sustainability practices advanced by First Quantum in our mining communities mirror those expressed formally through the Sustainable Development Goals (SDGs) established by the United Nations in 2015. In order to report our efforts towards supporting the SDGs current disclosures covered within this report have been mapped to the inventory of disclosures presented in "Business reporting on SDG's: An Analysis of the Goals and Targets". A summary of the SDG's represented in this report are as follows:























**√**=>



## **MATERIALITY**

An essential part of our strategy on sustainability is the identification and assessment of material sustainability topics at our operations. Identified material economic, environmental and social topics help First Quantum to understand the impact of our operations and guide strategic planning. In addition, these topics guide our reporting and allow us to prioritise information which is of value to our stakeholders. Through the annual revision of our material topics, we seek to proactively identify relevant material topics to aid in the transparent disclosure around our impact and contributions that our operations have in line with stakeholder needs.

In 2020, The Company commissioned an independent review of the materiality of our environmental, social and safety disclosures. The review included an analysis of our existing disclosures, a priority ratings review and a disclosure gap analysis. The Company expanded on this materiality assessment during the course of 2021 through active engagement with stakeholders, taking in consideration their expectations and feedback. Internal guidance on material topics were taken from risks identified through our group business risk register. In addition, the legal and regulatory requirements in which we operate and the direct economic, environmental and social impacts of our activities have been taken into consideration. Key topics identified from discussions with internal and external stakeholders were collated and mapped along with the 2020 material topics. This list was refined by analysing the relevant industry sustainability frameworks and sustainability strategy.

Our disclosure focuses on environmental, social and safety aspects that are considered to be of material significance to our Company and our stakeholders. The disclosure includes information and data on activities at our operations, closed properties, development projects, supporting offices and global exploration where we have financial and operational control. A summary of our reporting boundary is provided on the following page. More detail on the specific reporting topics are provided in the report.

#### **Considerations taken** into determining materiality:



DIRECT ECONOMIC, **ENVIRONMENTAL** AND SOCIAL IMPACTS



**RISKS IDENTIFIED** THROUGH OUR GROUP AND OPERATIONAL **LEVEL RISK REGISTERS** 



**EXPECTATIONS AND** FEEDBACK OF OUR **STAKEHOLDERS** 



**ENVIRONMENTAL AND SOCIAL TOPICS BASED ON INDUSTRY RELEVANT INDUSTRY** REPORTING STANDARDS



**LEGAL AND REGULATORY** REQUIREMENTS



**PRIORITIES IDENTIFIED** AT BOARD LEVEL

#### **Our stakeholders** include but are not limited to:



COMMUNITIES



**CIVIL SOCIETY ORGANISATIONS** 



**GOVERNMENT** AND REGULATORS





**ANALYSTS** 



**SUPPLIERS** 



**EMPLOYEES** 



GOVERNMENTAL **OPCANISATIONS** 



**INVESTORS** 



**CUSTOMERS** 



**MEDIA** 

#### The following topics have been identified as being material to the sustainability of the company.



COMMUNITY

**RELATIONS** 

**GREENHOUSE GAS EMISSIONS** 



HEALTH









**ENVIRONMENTAL** BOARD GOVERNANCE



**ESG REPORTING AND** COMMUNICATION





AND DIVERSITY

SOCIAL RISK







**TAILINGS** 



**LEGAL AND** REGULATORY COMPLIANCE



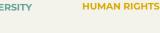
**EXECUTIVE PAY** 



CLOSURE/ REMEDIATION



**BIODIVERSITY** 





**AIR QUALITY** 

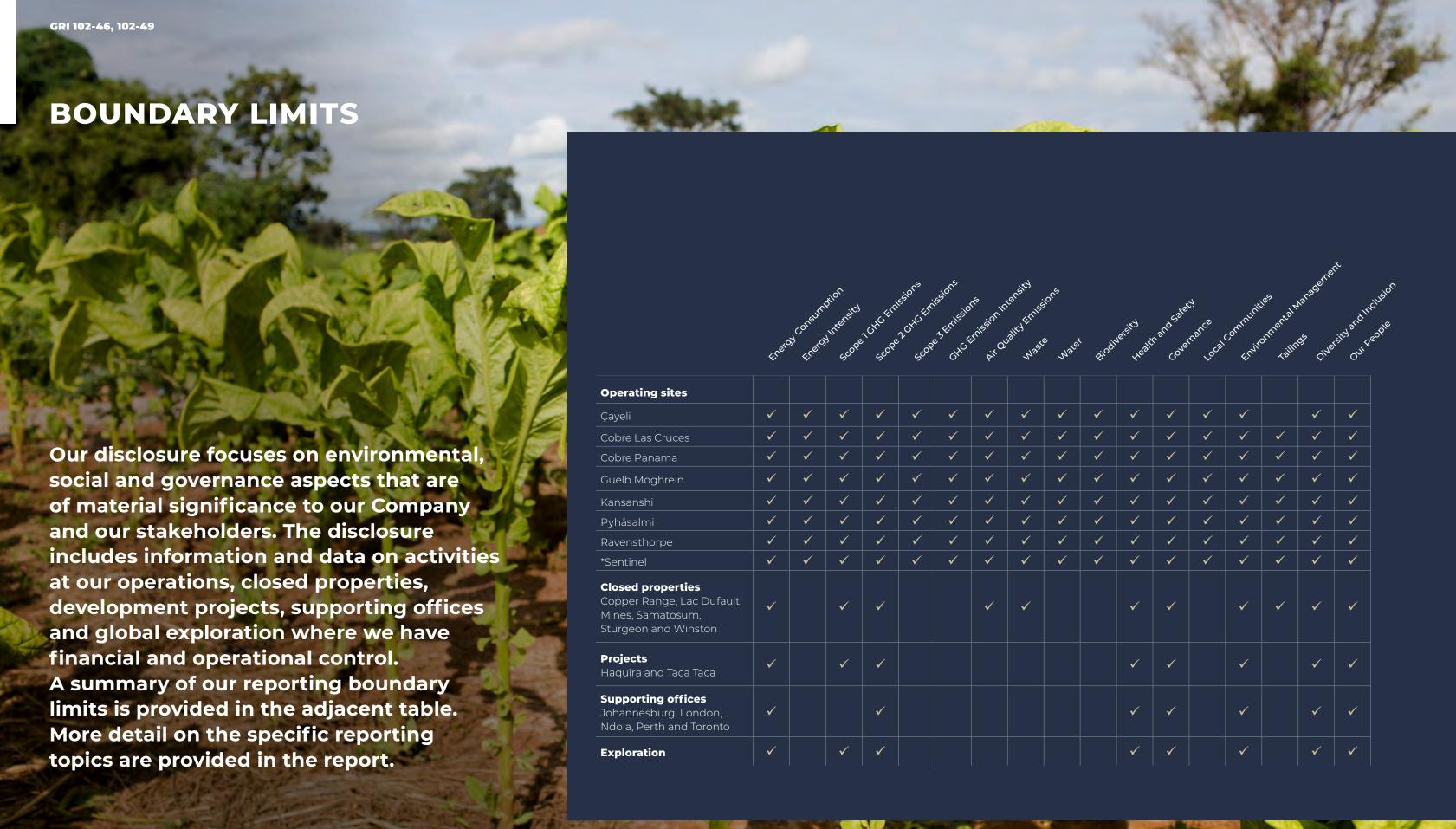


WASTE



MANAGEMENT

SUPPLY CHAIN MANAGEMENT



\*Includes data from Enterprise

### **GOVERNANCE**

DIRECTORS

FEMALE DIRECTORS

INDEPENDENT

AVERAGE **BOARD TENURE** 

**YEARS** 

AVERAGE **DIRECTOR AGE** 

YEARS



#### **BOARD**

The Board executes many of its responsibilities through its Committees, whose members are exclusively nonexecutive and independent directors of the Company.

#### **ENVIRONMENT, HEALTH & SAFETY AND CORPORATE SOCIAL RESPONSIBILITY** COMMITTEE

The Committee, which meets each quarter, reviews adherence by the Company to its environment, health and safety and, social policies and practices in accordance with applicable environmental, health and safety laws and regulations in those countries and locations in which the Company operates. The committee also reviews the effectiveness of the risk management policies and processes in those areas. The committee also oversees the Company's corporate social responsibility (CSR) strategy and programs, including its approach to human rights and local community engagement.

#### **AUDIT COMMITTEE**

The Committee's primary function is to assist the Board in fulfilling its financial reporting, control responsibilities as well as monitoring the internal control environment. The majority of the members of the committee are financial experts with considerable accounting and financial experience. The Audit Committee is responsible for investigating or responding to any reports through the Whistleblowing Policy that have not been resolved by the Company's compliance officer.

#### **HUMAN RESOURCES COMMITTEE**

The Committee reviews and recommends for approval by the Board executive compensation. The committee also reviews, identifies and mitigates risks that maybe associated with the Company's compensation policies.

#### **NOMINATING AND GOVERNANCE COMMITTEE**

The Committee reviews the Company's corporate governance practices in light of the standards and guidelines recommended or required by applicable corporate and/or securities regulatory authorities and stock exchanges, proxy advisory firms and other corporate governance organizations. A key component of the committee's work is to oversee Board succession and also Board refreshment with a mandate to improve diversity.

#### **MANAGEMENT**

Executive management has ultimate responsibility for the direct oversight of the implementation of our environmental, safety and social responsibility strategy.

Our strategy is supported by our Code of Conduct and our sustainability policies which apply across our business, to our employees, as well as our contractors and suppliers.

On-site responsibility for the implementation of policies and practices to support our sustainability performance and compliance is delegated to the relevant managers and teams at the operations. Compliance with our social, safety and environmental policies is managed and monitored through the

safety and environmental management systems that have been implemented at the operations.

Environmental, safety and social management oversight is provided by our Group Environmental and Safety Managers, who report directly to the Chief Executive Officer (CEO).

Furthermore, we provide governance and risk management oversight through:

- The development of risk management methodologies and the assignment of adequate resources to manage and appropriately mitigate risks across our operations:
- Ensuring sustainable development policies, practices and monitoring mechanisms to track our performance.

Detailed information on the Company's principal risks and corporate governance model, which includes further information on executive compensation can be found in the Company's most recent Annual Information Form and the Management Information Circular.

#### CONDUCT

First Quantum is committed to conducting its business with high standards of ethics.

The Company requires its directors, officers and employees to comply with all applicable laws and regulations as well as internal policies and has adopted a Code of Conduct that applies to Directors, officers and employees of the Company as well as suppliers.

Adherence to the Code of Conduct is fundamental to the conduct of the Company's business and our reputation and sets out how everyone that works for the Company is expected to conduct themselves whilst representing the Company.

It is reviewed annually and updated as appropriate with compliance confirmation completed by employees on an annual basis.

Employees should feel confident to report or assist in the investigation of alleged violations. Under the Company's Whistle-blowing Policy any retaliation or discrimination of any kind against any other employee making a good faith complaint or assisting in the investigation of any alleged violation is prohibited.

All serious breaches of the Code of Conduct are reported to the Company's Audit Committee.

**EXECUTIVE COMPENSATION** 

## **PERFORMANCE METRICS Business development and** strategy advancement Financial results People performance **External relations Business execution and impact**

--- ESG linked

Safety

on the environment

# **RESPONSIBLE SUPPLY CHAIN**

Where commercially possible, First Quantum endeavours to prioritise local firms.

The Company is committed to the maintenance of its local procurement programs, which includes:

- · Building capacity in local supply chains,
- Prioritizing the procurement of goods and services from local firms where commercially possible, and
- · Continuing to engage in local tender programs, where appropriate facilitated by the local Chambers of Commerce.

MORE THAN KANSANSHI AND

SENTINEL SUPPLIER **SPEND** IS WITH **ZAMBIAN REGISTERED COMPANIES** 

SUPPLIER **SPEND** BY PANAMANIAN REGISTERED

At First Quantum we seek to operate in the most responsible manner achievable. This means that we expect the same high levels of transparency, accountability and performance in operating in a socially responsible and environmentally sensitive way from our suppliers and contractors, as we do from our employees.

We will only do business with suppliers, including contractors, who maintain and demonstrate:

- · lawful business practices;
- · safe, healthy and fair workplaces;
- · zero tolerance for human rights violations, in relation to both their people and the communities in which they work; and
- business practices that minimise environmental impact.

We monitor adherence to our policies by our suppliers not only through the relationships that we maintain through our site commercial and operational teams, and communities, but also through our whistle-blowing hotline and grievance mechanism, in place at each of our projects and operations.

We require suppliers, including contractors, to comply and to demonstrate compliance with applicable laws and regulations and to ensure and monitor compliance and to inform us immediately of any issues and make efforts to remedy and address any instances of non-compliance.

At First Quantum, we have a zero-tolerance for human rights violations, by either employees or suppliers, including contractors. Our Code of Conduct, applicable to suppliers and contractors, explicitly forbids the exploitation of child labour or human rights abuses.

Any supplier or contractor who breaches the law, the Code of Conduct or other Company policies may be subject to termination of contract by First Quantum.

# CLIMATE **CHANGE**

**TARGETS** 

2025

30%

**REDUCTION IN ABSOLUTE SCOPE 1** AND SCOPE 2 GHG EMISSIONS

2030

50%

REDUCTION IN ABSOLUTE SCOPE 1 AND SCOPE 2 AND INTENSITY OF **GHG EMISSIONS** 

**ACTIONS IMPLEMENTED TO DATE** 

**CARBON PRICE** 

FOR NEW PROJECT EVALUATION

COMMENCED

TCFD-ALIGNED REPORTING

#### OUR COMMITMENTS

We recognise that our major sites are located in developing countries so care with regards to their economies must be taken into account. We intend to work with our host governments on climate-related issues in the context of Nationally **Determined Contributions** (NDCs), through the transition to appropriate and sustainable alternative sources of energy, as well as through continued support for reforestation initiatives.

- · Identify and manage climate-related physical and transition risks and opportunities. The Company plans to invest appropriately to improve the climate resilience of our operations.
- Improve efficiency, energy intensity and reduce wastage and emissions by continually challenging the status quo, leveraging our innovative culture and new technologies as they become commercial.
- · Prioritise the use of renewable energy sources for new and existing operations where they are achievable.
- · Support the transition to a low carbon economy by mining the metals required to deliver this global initiative as responsibly as we can.
- · Increase the transparency of our climate change reporting and communications, including continuing to disclose our data across a selection of ratings agencies and platforms and report in line with the TCFD recommendations.

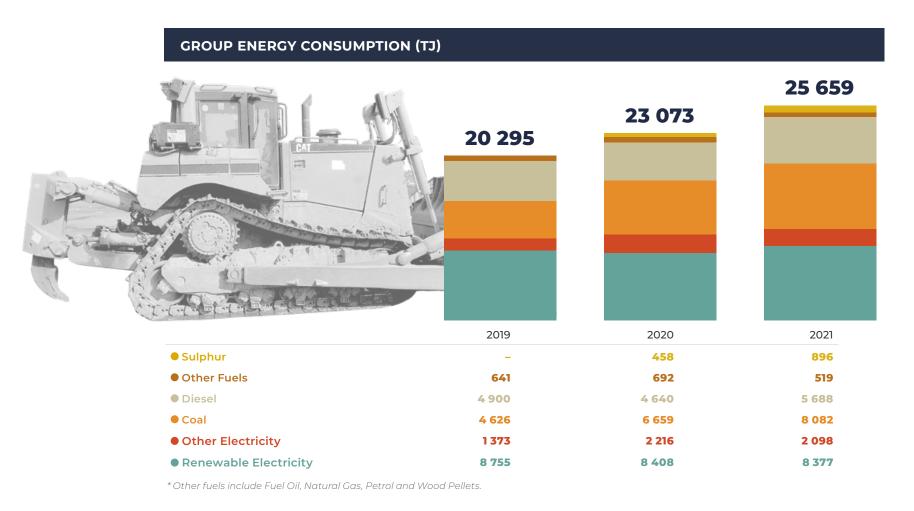
- · Report on our performance across a range of industry accepted metrics, including Scope 1 and 2 emissions, Global Reporting Initiative (GRI) and CDP.
- · Improve our understanding of lifecycle emissions for the copper, nickel, gold and cobalt value chains and consider partnerships with suppliers and customers to reduce our value chain emissions.
- · Set tangible targets through the execution of real projects to implement change as a strategic priority of the Company. We consider targets focusing on the absolute emission levels and carbon intensity of our operations as the most appropriate measures of our performance at this time.
- · Integrate an internal carbon price and the expected determinant impacts on commodity prices in the evaluation of our new projects



# **ENERGY CONSUMPTION**

2019 - 2021

Mining, mineral processing and smelting activities, and transportation require significant amounts of energy. First Quantum is committed to optimise energy consumption by continually challenging the status quo, improving efficiencies and reducing wastage. In 2021, group energy consumption increased by 11%. The increase was principally attributable to the ramp up in operations at Cobre Panama and Ravensthorpe. In 2021, due to the increased mining and processing activities at Cobre Panama, more power generated by the power station was consumed onsite.

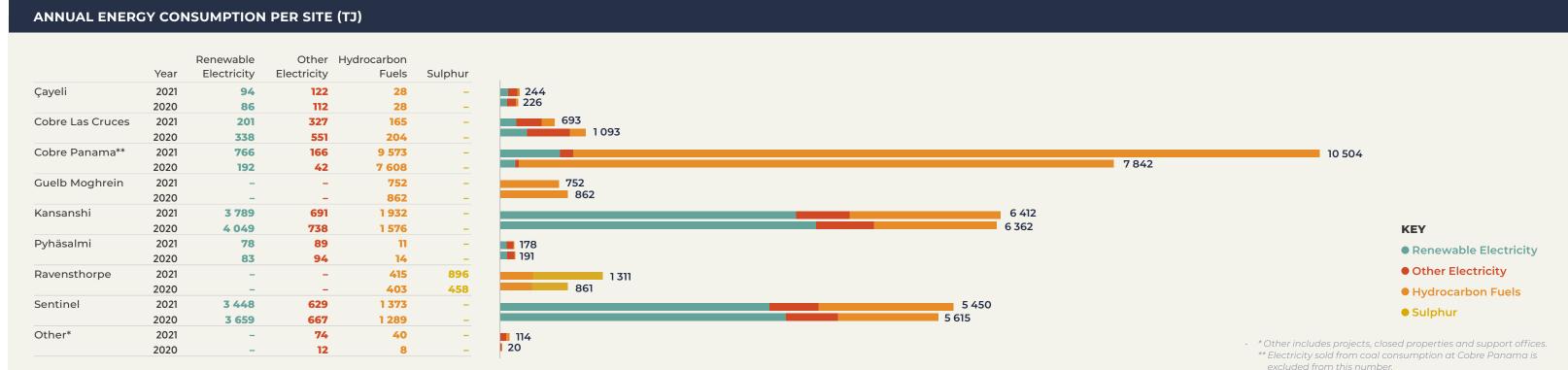


33%
OF ENERGY CONSUMED IN 2021
WAS FROM RENEWABLE SOURCES

5%
ANNUAL INCREASE OF
COPPER PRODUCTION

27.5
ENERGY INTENSITY
GJ/TONNE Cu-eq

ANNUAL INCREASE IN ENERGY USED BY ALL OPERATIONS





# PURCHASED ELECTRICITY CONSUMPTION

2019 - 2021

Where available, each site purchases electricity directly from independent electricity suppliers. Typically, these are large scale utility companies servicing thousands of clients across a national electricity grid. The energy we generate on site is not included in the purchased electricity consumption, but is included in the overall energy consumption. Where independent power is not available, our sites generate their own power.

In 2021, purchased electricity consumption decreased marginally. As with previous years, 80% of our purchased group electricity is generated by renewable energy.

10 475<sup>TJ</sup>

TOTAL **ELECTRICITY CONSUMPTION** FOR 2021

80% RENEWABLE FOR 2021

77% OF THE GROUPS PURCHASED ELECTRICITY CONSUMPTION IS HYDRO-ELECTRICITY

**1.4**%

DECREASE IN
PURCHASED ELECTRICITY
CONSUMPTION

#### **PURCHASED GROUP ELECTRICITY CONSUMPTION (TJ)**



#### **PURCHASED SITE ELECTRICITY CONSUMPTION (TJ)** Non-renewable Renewable Nuclear **KEY** 2021 216 Çayeli 122 94 Non-renewable 2020 112 86 198 Renewable 2021 Cobre Las Cruces 215 201 112 528 Nuclear 2020 338 889 361 190 2021 Cobre Panama 166 766 932 2020 192 42 234 Guelb Moghrein 2021 2020 2021 Kansanshi 691 **3 789** 4 480 2020 **738** 4 049 2021 Pyhäsalmi **78 58** 31 167 2020 **33** 83 **62** 178 2021 Ravensthorpe 0 2020 2021 Sentinel 629 3 448 4 077 2020 667 3 659 4 326 Other\* 2021 74 74 2020 12 12 \* Other includes projects, closed properties and support offices











# **GREENHOUSE GAS EMISSIONS**

2020 - 2021

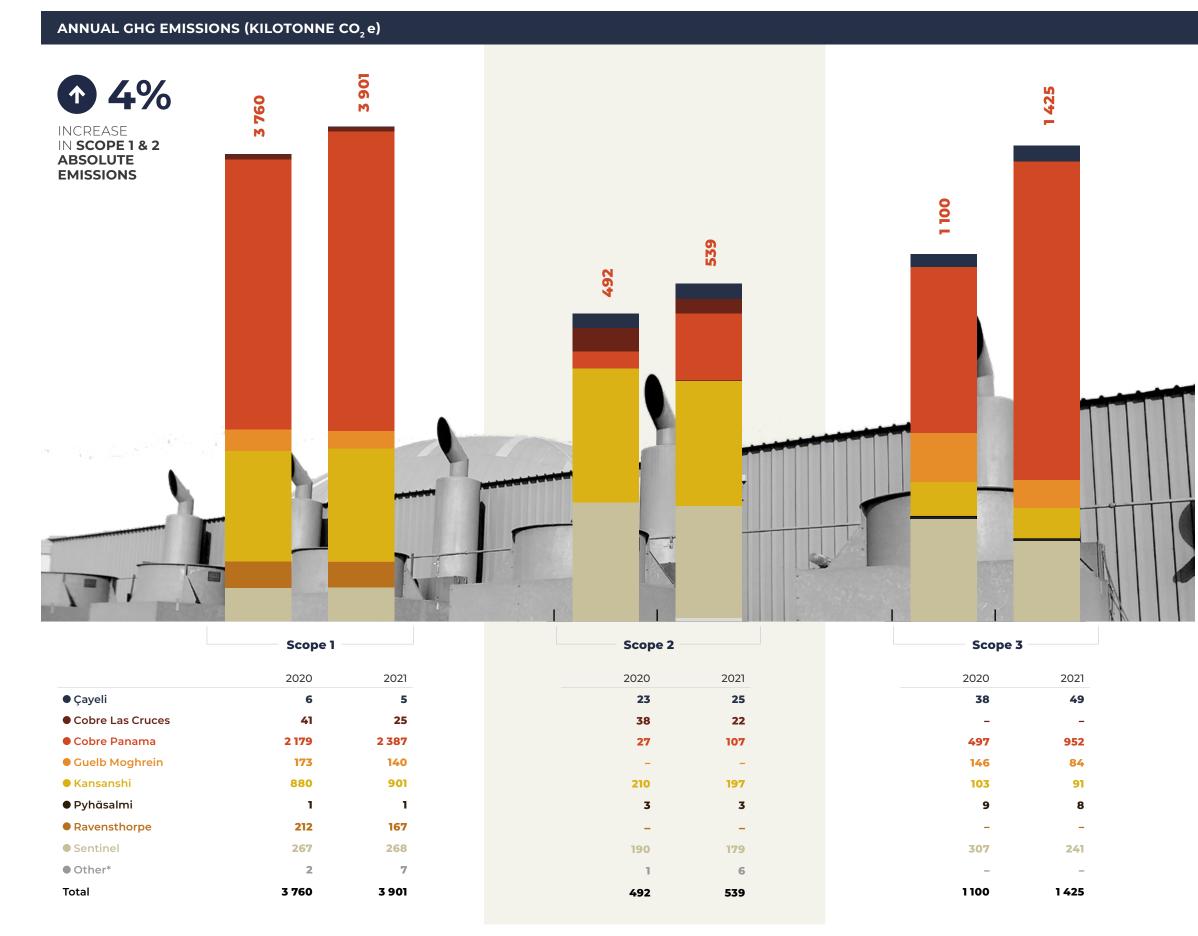
#### **SCOPE 1 AND SCOPE 2**

The Company has a core commitment to minimise energy consumption by a continued prioritisation of innovation, improving efficiencies and reducing wastage. GHG emissions are generated during the direct combustion of fuels on site (Scope 1) and by independent suppliers of electricity (Scope 2). Given the scale of our operations and the quantities of energy required, our GHG emissions are considered significant.

In 2021, our absolute Scope 1 Greenhouse Gas emissions increased by 5%, while the Scope 2 emissions increased by around 10%. Our Scope 1 emissions increase was principally due to increased coal and diesel consumption at Cobre Panama as production levels were at full capacity for the year following reduced operations in 2020 due to health and sanitary protocols imposed in response to COVID-19.

#### **SCOPE 3 (UPSTREAM)**

We have also provided estimates of downstream Scope 3 emissions for each operating site. Downstream Scope 3 emissions typically include all of the emissions associated with producing a final product. These emissions are therefore associated with the transportation, smelting and refining of copper concentrate, and copper anodes to produce copper cathode. The estimated Scope 3 emissions are not associated with any upstream activities or supply chain emissions.



<sup>\*</sup>Other includes projects, closed properties and support offices.

# **ENERGY AND EMISSIONS INTENSITY**

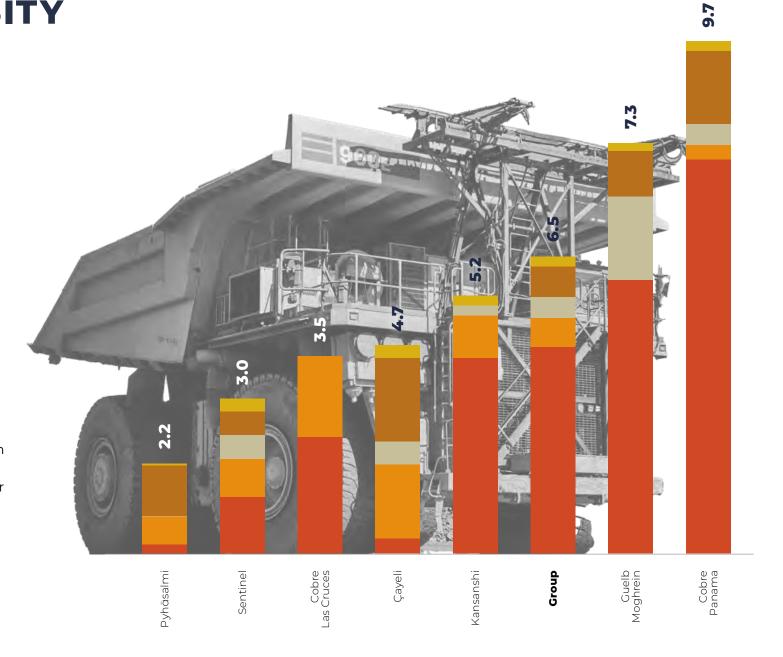
#### **Cu-eq INTENSITY** (TONNE CO,e/TONNE Cu-eq)

Our Scope 1 GHG emissions per tonne of copper equivalent increased in 2021 compared to 2020. This is a result of increased fuel consumption required for increased production. The increased consumption of fuel for power lowered the demand for electricity supplied by the grid. Therefore, the combined Scope 1 and 2 GHG emission intensity for 2021 is broadly in line with the scope 1 and 2 GHG emission intensity in 2020.

First Quantum has provided estimates of downstream Scope 3 GHG emissions per tonne of copper equivalent for each operating site. Downstream Scope 3 emissions typically include all of the emissions associated with producing a final product. These emissions are therefore associated with the transportation, smelting and refining of copper concentrate, and copper anodes to produce copper cathode. The estimated Scope 3 emissions are not associated with any upstream activities or supply chain emissions. In 2021 the scope 3 intensity values have increased by 30%, a result of greater volumes of copper concentrate being transported compared to 2020.

The copper intensity (tonne CO<sub>2</sub>e/tonne Cu-eq) for the Company's operations are compared with global copper mines in the curve in the top right.

#### Cu-eq INTENSITY (TONNE CO,e/TONNE Cu-eq)



	Scope 1	Scope 2	Scope 3 Freight	Scope 3 Smelting	Scope 3 Refining	Total
Çayeli	0.3	1.5	0.8	1.9	0.2	4.7
Cobre Las Cruces	1.9	1.6	_	_	_	3.5
Cobre Panama	6.7	0.3	0.8	1.6	0.2	9.7
Guelb Moghrein	4.6	0.0	1.2	1.3	0.2	7.3
Kansanshi	4.0	0.9	0.2	_	0.2	5.2
Pyhäsalmi	0.2	0.6	0.0	1.4	0.0	2.2
Sentinel	1.1	0.8	0.2	0.6	0.2	3.0
Total	4.2	0.6	0.5	0.9	0.2	6.5



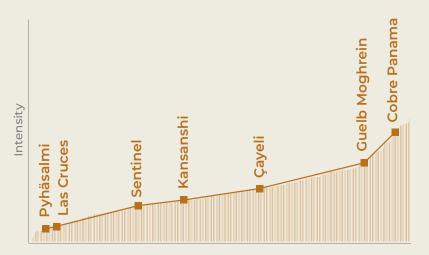






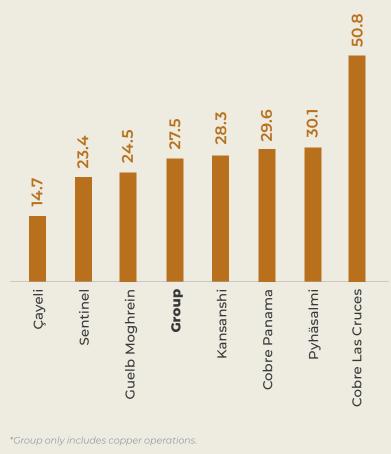


#### GLOBAL COPPER MINES CU EQ INTENSITY (TONNE CO,e/TONNE Cu-eq) CURVE



Data was provided by Skarn Associates (www.skarnassociates.com)

#### **ENERGY INTENSITY (GJ/TONNE Cu-eq)**







# **AIR QUALITY EMISSIONS**

2019-2021

First Quantum monitors atmospheric emissions from our operations at a number of fixed emission points at our operating sites. As standard practice First Quantum monitors emissions against international standards such as WHO air quality guidelines and local air quality standards of our host countries. The air quality emissions presented in this chapter are non-fugitive process emissions from pyrometallurgical and refining processes undertaken at our operations.

The data presented in this section are the cumulative emission of Nitrous Oxide (NO<sub>2</sub>), Sulphur Dioxide (SO<sub>2</sub>) emissions and Particulate Matter (PM) are monitored at our sites. The Company's emissions were up by 5% since 2021 for NO<sub>2</sub>. Whilst SO<sub>2</sub> and PM decreased by 19% and 31% respectively.

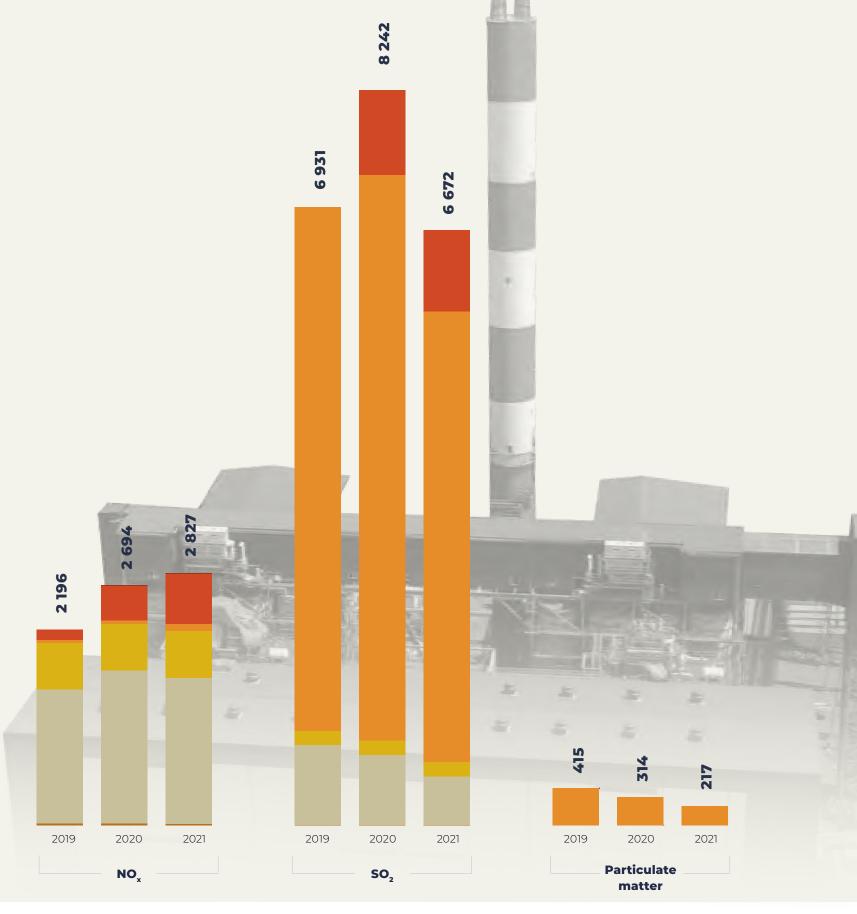
ANNUAL NO <sub>x</sub> EMISSIONS (TONNE)					
	2019	2020	202		
Cobre las Cruces	18	19	1		
Cobre Panama	1 504	1 714	1 63		
<ul><li>Guelb Moghrein</li></ul>	521	524	52		
<ul><li>Kansanshi</li></ul>	37	34	7		
<ul><li>Ravensthorpe</li></ul>	113	400	57		
<ul><li>Closed Properties</li></ul>	3	3			

Sentinel

ANNUAL SO <sub>2</sub> EMISSIONS (TONNE)				
	2019	2020	2021	
• Cobre las Cruces	1	1	1	
Cobre Panama	897	788	547	
<ul><li>Guelb Moghrein</li></ul>	159	160	162	
● Kansanshi	5 872	6 342	5 051	
<ul><li>Ravensthorpe</li></ul>	_	950	910	
<ul><li>Closed Properties</li></ul>	1	1	1	
• Sentinel 1 -				

	2019	2020	2021
• Cobre las Cruces	-	-	-
● Kansanshi	415	314	217
<ul><li>Closed Properties</li></ul>	-	-	-

ANNUAL PARTICULATE MATTER EMISSIONS (TONNE)



# 6 CLEAN WATER AND SANITATION

## **WATER**

202

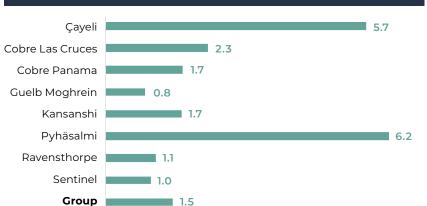
Large quantities of water are essential for almost all mining and mineral processing activities. Our water consumption is considered to be a material aspect across all of our operations. First Quantum has a core commitment to minimise water withdrawal and discharge by adopting new technologies, continually improving efficiencies and on site water reuse. Water re-use for 2021 was 73% which is an increase of 6% compared to 2020. Water withdrawal per ton of ore milled decreased by 5% in 2021, compared to 2020.

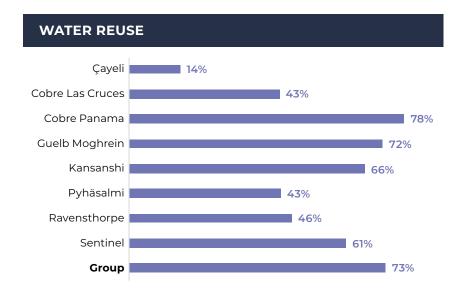


5%

DECREASE IN WATER
WITHDRAWN PER TON OF ORE
MILLED COMPARED TO 2020

# WATER INTENSITY (M³ WITHDRAWAL PER TON OF ORE MILLED





#### WATER INPUT AND OUTPUT FOR MINE OPERATIONAL PROCESSES (MEGALITRE)

#### **TOTAL ESTIMATED OPERATIONAL**

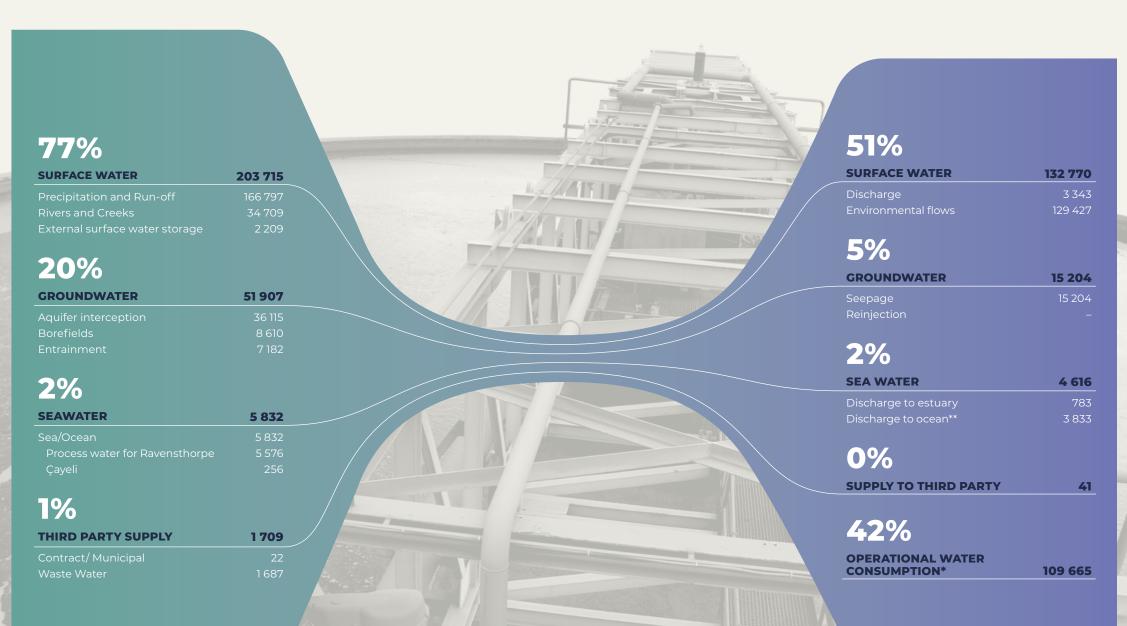
**WATER WITHDRAWAL** 

263 162

#### **TOTAL ESTIMATED OPERATIONAL**

**WATER DISCHARGE** 

262 296

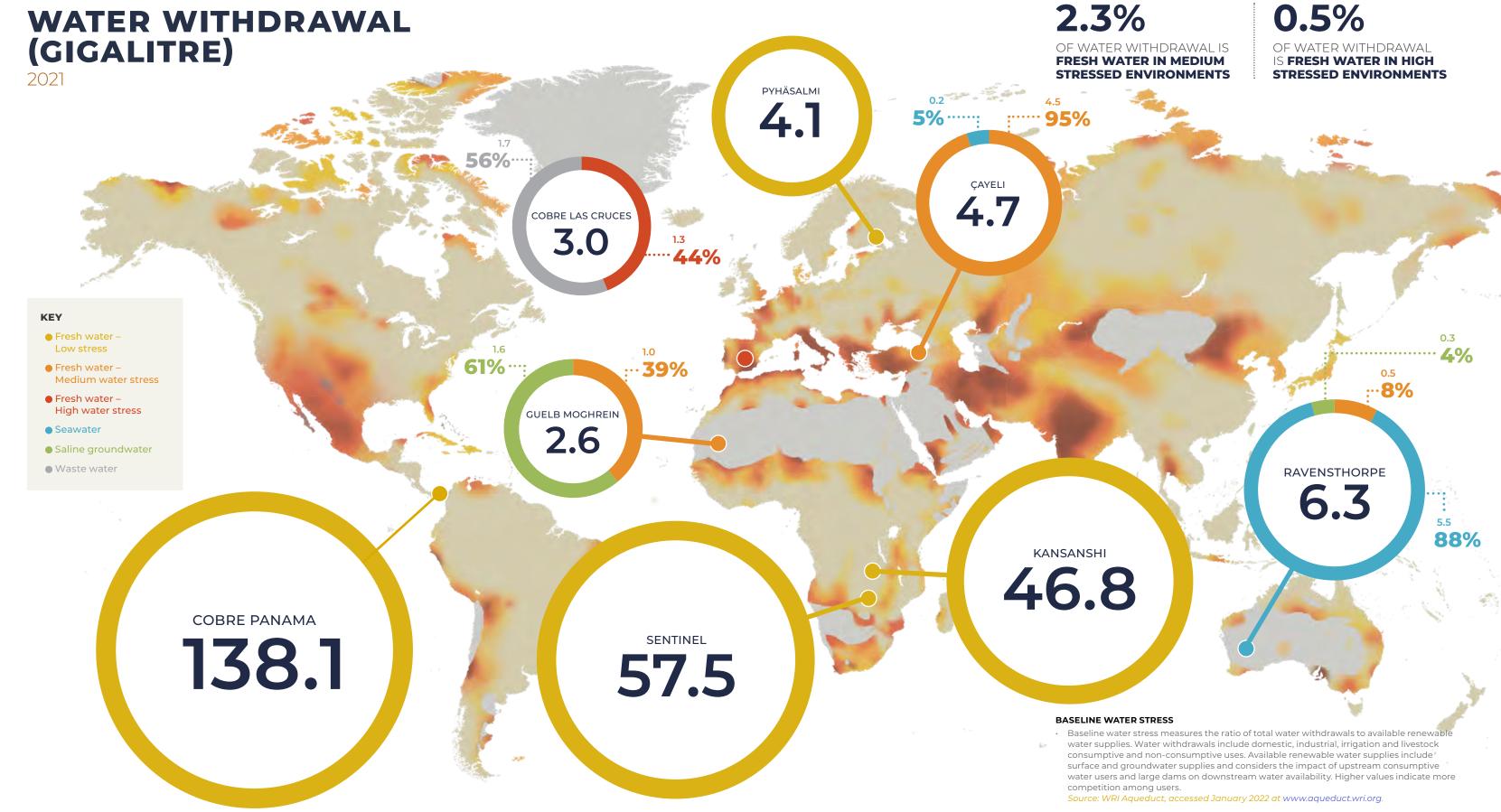


\*Water not released back to surface water, groundwater, seawater or a third party. Includes evaporation, entrainment and task loss.

\*\*438 064 ML of sea water was withdrawn in 2021 for cooling water at the Cobre Panama power station, of this 437 383 ML was discharged.

Since this use of water is not directly used for mining operational processes it is not included in the above water input and output diagram.





438 064 ML of sea water was withdrawn in 2021 for cooling water at the Cobre Panama power station, of this 437 383 ML was discharged. Since this use of water is not directly used for mining operational processes it is not included in the above diagram.









## **WASTE**

#### 2020-2021

First Quantum generates the following waste at its operations:

- Hazardous waste including used lubricants, batteries, hydrocarbons and process related chemicals;
- Non-Hazardous waste including organic matter, wood, construction rubble and plastics;
- Re-used waste including waste oil and scrap metals.

All waste is managed in accordance with national waste management regulations, site specific permits and relevant international protocols. In line with our environmental policy we continue to look at ways of reducing, reusing or recycling waste. All waste is measured by our in house teams on site.

Hazardous waste increased in 2021, attributable to the greater medical waste at Cobre Panama, as a result of the health and sanitary controls imposed in response to the COVID-19 pandemic and successful vacation efforts on site during 2021. Non-hazardous waste reduced by 35% in 2021.

#### HAZARDOUS AND NON-HAZARDOUS WASTE PER SITE (TONNE)

Site	Year	Hazardous Waste	Non-Hazardous Waste
Çayeli	2020	151	727
	2021	158	776
Cobre las Cruces	2020	531	742
	2021	295	774
Cobre Panama	2020	2 282	90 416
	2021	5 849	79 874
Guelb Moghrein	2020	746	436
	2021	391	172
Kansanshi	2020	1 828	26 934
	2021	2 421	17 300
Pyhäsalmi	2020	45	239
	2021	62	320
Ravensthorpe	2020	80	1 093
	2021	89	527
Sentinel	2020	1 394	17 249
	2021	5 093	6 033
Other	2020	350	7
	2021	1	4

\*Other includes projects, closed properties and support offices.

#### MANAGEMENT OF HAZARDOUS AND NON-HAZARDOUS WASTE (TONNE)

then reused.



		Hazardous	Non-Hazar	dous
	Hazardous Waste	Hazardous Waste	Non-hazardous Waste	Non-hazardous Waste
	2020	2021	2020	2021
<ul><li>Stored</li></ul>	30	50	17 025	117
<ul><li>Incineration</li></ul>	3 330	6 979	189	1 183
● Reuse	2 659	6 572	9 021	14 905
<ul><li>Landfill on site</li></ul>	844	328	94 290	66 695
● Landfill off site	239	147	17 318	22 880
<ul><li>Composting/Bioremediation</li></ul>	304	283	-	-



# ENVIRONMENTAL INCIDENTS

2019-2021

At First Quantum, we believe that an effective Environmental Management System (EMS) is key to sound environmental practice and to reducing environmental risk. The Company has implemented EMSs at all of its operations.

The EMSs, which are aligned with the ISO14001: 2015 standard, are subject to annual external compliance audits. As part of the EMS, the Company has implemented a five tier environmental incident classification system.

All operations are required to record and report incidents monthly according to this classification.

A serious Level 4 or Level 5 incident is communicated to the CEO and the Environmental, Health and Safety and Corporate Social Responsibility Committee immediately.

#### RATING IMPACT ON THE ENVIRONMENT

- 1 Not impacting the environment
- 2 Impact on environment is minimal
- 3 Measurable short-term impact on environment and is reversible
- 4 Significant measurable impact on the environment which is reversible with remediation
- 5 Significant measurable environmental impact requiring significant remediation efforts

LEVEL 4 OR LEVEL 5
INCIDENTS IN 2021

**©28%** 

DECREASE IN LEVEL 3 INCIDENTS SINCE 2017

ANNUAL TARGET OF REDUCING **LEVEL 3** INCIDENTS BY

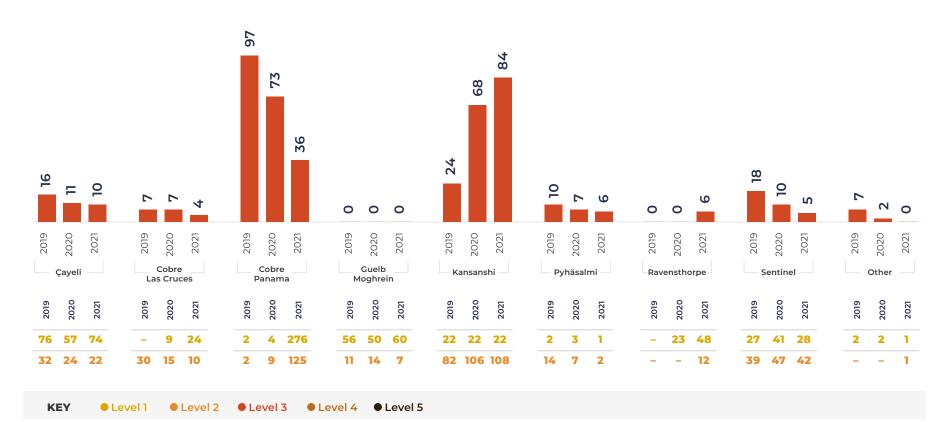


While the company aims to reduce all environmental incidents across the group, we have always focused on the incidents with the highest potential, namely Levels 3, 4 and 5. These incidents have the biggest potential impact on the environment around our operations and will always be a priority. In 2021, we again recorded no level 4 or 5 incidents and reduced our Level 3 incidents by more than 15%. Our level 1 and 2 incidents increased significantly in 2021. The increase is largely attributable to improved incident reporting and a maturing EMS at Cobre Panama, as the mine ramped up to steady state production levels. The large number of Level 1 and 2 incidents is useful in identifying trends and events with greater potential. As further controls are implemented at Cobre Panama, we are confident that the number of incidents will reduce. Kansanshi showed an increase in Level 3 incidents in 2021. The increase is a function of the significant organic growth experienced at Kansanshi over the last 16 years. A number of action plans are in place to reduce these incidents.

#### NUMBER OF ENVIRONMENTAL INCIDENTS



#### TOTAL NUMBER AND SEVERITY OF ENVIRONMENTAL INCIDENTS PER SITE



\*Other includes exploration, projects, closed properties and support offices.









# BIODIVERSITY - COBRE PANAMA

#### COMMITMENT TO NET POSITIVE IMPACT ON BIODIVERSITY IN PANAMA

As we seek to achieve this, we will:

- 1. Reduce deforestation and habitat loss caused by illegal logging and mining through support for rangers and law enforcement institutions as well as our agroforestry programs.
- 2. Focus on biodiversity through species level conservation and support for ecosystems to increase their populations.
- 3. Increase sustainability of funding for these protected areas.

#### NOTE

Baseline surveys and subsequent work on the site revealed a number of species of concern (SoC) within and immediately adjacent to the project footprint. Terrestrial fauna SoC include 4 amphibian species, 15 bird species, 2 reptile species, and 10 mammal species. Marine SoC include three fish species, a crustacean, 2 marine mammals and 4 species of marine turtles. The current flora SoC list includes 51 species.



#### **COBRE PANAMA**

Cobre Panama lies entirely within the Mesoamerican Biological Corridor of the Panama Atlantic (MBCPA) and the Golfo de los Misquitos Forests Important Bird Area. The region supports very high biodiversity and is also home to the Santa Fe and Omar Torrijos National Parks. In recognition of the site's high biodiversity and biological sensitivity combined with some gaps in scientific knowledge in the area, Cobre Panama has made the following commitments:

- 1. The Company has developed and implemented a Biodiversity Action Plan (BAP). The BAP enables continuous collection of information on flora and fauna in the project area and the integration of new knowledge into bio-diversity management practices over the life of mine and beyond;
- 2. To have a net positive impact (NPI) on biodiversity in Panama and to be a world leader in biodiversity management;
- 3. To follow both national regulations, as described in its Environmental and Social Impact Assessment (ESIA), and international best practices for biodiversity management, such as those described in the International Finance Corporation's Performance Standard 6 (PS6), the Business and Biodiversity Offset Program's (BBOP) Standard on Biodiversity Offsets, and the International Council on Mining and Metals (ICMM) Good Practice for Mining and Biodiversity;
- 4. To implement three core biodiversity management activities including Protected Area Plan, Reforestation Program and Species-level Conservation Plans.

#### **PROTECTED AREA PLAN**

Cobre Panama has committed to support three protected areas in the MBCPA.
Following the incorporation of the Cobre Panama Foundation in 2019, Cobre Panama and Ministry for the Environment have now signed a long-term agreement to continue to support the protected areas around MBCPA. The areas are the Santa Fe National Park (72 636 ha), Omar Torrijos National Park (25 275 ha) and a protected area to be established in the District of Donoso and its coastal marine zone (> 150 000 ha). The main objectives of the protected area plan are:

- Reduce deforestation and subsequent habitat loss, in the area surrounding the Cobre Panama project;
- Conserve habitat for species populations that may be impacted by the project to ensure their long-term recovery from the Company's direct impacts and their long-term viability;
- Compensate for the loss of natural habitat (both temporary and permanent) in the project footprint.
- Fund and build capacity for the management of protected areas currently threatened by deforestation.

#### REFORESTATION PLAN

Cobre Panama has committed to reforestation of 10 475 ha (7 375 ha outside the mine footprint and 3 100 within the mine footprint) using three distinct programs.

- The Agroforestry Program focusses on providing benefits to communities, while also improving ecological conditions by increasing native tree cover. The program will focus on areas outside the mine footprint;
- The Ecological Restoration Program will conduct reforestation inside protected

- areas and other locations that can be permanently protected with the goal of restoring native forests with structural and compositional diversity. The program will focus on areas outside the mine footprint:
- The Footprint Rehabilitation Program will be focused on the stabilization and rehabilitation of the mining footprint. Clearing of the project footprint will occur over a number of years.

## SPECIES-LEVEL CONSERVATION PLANS

Cobre Panama has committed to implementing a number of species level management plans. These have been developed with the aim of addressing the management needs of individual species for which the protected areas and reforestation plans may not be sufficient. Each species action plan describes a portfolio of actions aimed at ensuring a net positive impact on species viability. During the development and implementation of these species action plans, Cobre Panama is currently partnered with the following independent organisations:

- Smithsonian Tropical Research Institute (STRI) of Tropical Investigations (Panama Amphibian Rescue and Conservation) – assisted with developing facilities at two sites to provide for the long-term care and breeding of the four amphibian SoC;
- Sea Turtle Conservancy monitoring and research of sea turtles both within and adjacent to the site as well as remote populations;
- Peregrine Fund promotes the conservation of the Harpy Eagle;
- Missouri Botanical Gardens;
- Yaguara promotes habitat conservation and research of the jaguar in Panama.





# **BIODIVERSITY -**ZAMBIA

WLCP IS A **STRATEGIC IMPLEMENTING PARTNER** FOR THE UNFP GFF7 PROJECT

US\$5M

INVESTED IN CONSERVATION AND WILDLIFE ACTIVITIES IN THE WEST LUNGA ECOSYSTEM **SINCE 2014** 

THE WEST LUNGA ECOSYSTEM SUPPORTS UP TO



#### SUPPORTING SOCIAL AND ECOLOGICAL DEVELOPMENT

In 2010, FQM Trident Ltd, a 100% owned and operated subsidiary of First Quantum, developed the Trident Project (which includes the Sentinel Mine and Enterprise **Development Project) adjacent to the West Lunga Ecosystem. FQM Trident established the Trident Foundation** soon after mining activities commenced with the mission of supporting social and ecological development in northwestern Zambia through health, education, agriculture, local business development, livelihood support, and wildlife and biodiversity conservation initiatives.

#### WEST LUNGA CONSERVATION PROJECT

The 11 750 km<sup>2</sup> West Lunga Ecosystem (WLE), situated in north-western Zambia encompasses the West Lunga National Park, Chibwika Ntambu, Musele Matebo, Lukwakwa and Chizela Game Management Areas. The area is important from both a hydrological and ecological perspective. The WLE forms the core of the Kabompo watershed which is the largest tributary of the Upper Zambezi and also feeds into the headwaters of the Kafue River system with extensive wetlands and floodplain habitat. From a botanical perspective, the WLE hosts up to a thousand species, of which over 50 are endemic. The area also supports large tracts of dry-evergreen Cryptosepalum forests, unique to this part of Zambia. The WLE once supported large populations of a multitude of large mammal species including elephant, buffalo, sable, roan, Lichtenstein's hartebeest, lion, leopard and wild dog. Unfortunately, most mammal species have been severely impacted by illegal hunting over the last 50 years and today remnant populations survive by hiding in the extensive forest. In addition to illegal hunting, the WLE faces a multitude of ecological threats from in-migration, commercial timber exploitation, unsustainable agricultural practices, encroachment and poor governance.

In 2014, the Trident Foundation and the Zambia Wildlife Authority (ZAWA, now the Department of National Parks and Wildlife) developed a Memorandum of Understanding (MoU) to guide the implementation and execution of a project (known as the West Lunga Conservation Project ) to provide logistical, technical, financial and managerial support for the WLE.

Since the signing of the MoU, the Trident Foundation has invested more than \$5 million in conservation and wildlife activities through the West Lunga Conservation Project. The investment has primarily focused on supporting the Department of National Parks and Wildlife's (DNPW) conservation management activities on the ground, which has included recruiting, training, equipping and paying wildlife rangers, vehicle maintenance and transport support, infrastructure development and communications. A number of conservation related livelihood programs have also been developed in surrounding communities including the creation of a Community Game Reserve in Ntambu Chiefdom, a honey out-grower program and a Community Tourism Camp.

Discussions are ongoing to reach an agreement for the devolution of managerial control of some of the WLE's protected areas to the West Lunga Conservation Project, in partnership with DNPW and Community Business Units. The overall objective of the various partnerships are to restore the WLE to its full ecological potential and create an environment where wildlife and conservation based economies can thrive. This will generate equitable benefits for surrounding communities that aim to reverse the trends of unsustainable land use and place a positive value on the preservation of the resource.

Revenue generation will be facilitated through community game ranching for the supply and sale of meat, tourism (consumptive and non-consumptive), honey production, and non-timber forest product value chain enhancements.

Livelihood achievements include:

- 152 animals from 8 species were released into Ntambu Community Game Reserve
- · 8 200 beehives distributed to 800 beekeepers since project inception
- · Application to gazette the Kabompo catchment as a Fisheries Management Area submitted to Department of Fisheries
- · WLCP provided employment (full time and part time) to over 200 community members around the WLE in 2021
- · 10 elephants came into the WLE suspected to have come from Kafue National Park stimulating the conversation of a historical corridor that is still believed to be active
- More than 19 000 wire and rope snares confiscated through more than 2 000 patrols by park rangers
- 58 live pangolins rescued from hunters
- · Carbon assessment facilitated identifying an estimated 100 million tonne carbon sink in
- Ongoing research into aquatic biodiversity, socioeconomic surveys, mammal ground counts and camera trapping network in partnership with the WWF and the Zambian Carnivore program

Visit www.westlunga.org for more information



## **SAFETY**

2019-2020

During 2021, tragically, a security contractor working for the Company was involved in a fatal road traffic accident at the Kansanshi mine. The accident was subject to internal and external investigation, which were completed during the year, and the lessons learned from this tragic event have been shared within the Company with the aim of preventing similar accidents in the future.

First Quantum's Health and Safety Management System (HSMS) formalises First Quantum's approach to Health and Safety (H&S) management to ensure consistency across all our operations. The HSMS clearly sets out the expectations for all First Quantum employees, including all contractors. This ensures that everyone is using the same strategy to achieve the same objectives.

#### **HSMS BENEFITS**

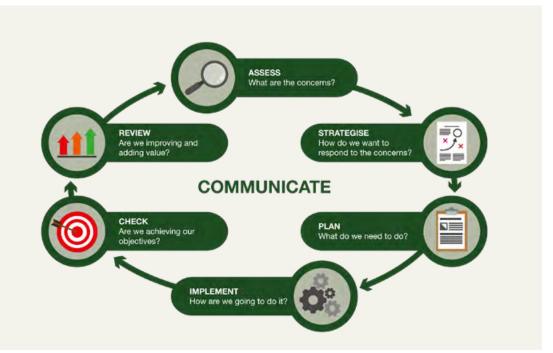
- Provides a systematic approach to the identification of H&S issues.
- Ensures that a system of risk identification and management is in place.
- Outlines a framework for personal, site and corporate H&S responsibility and leadership.

2019

- Gives a systematic approach for the attainment of H&S objectives.
- Ensures continued improvement of H&S programs, training and performance.
- Allows us to be compatible with the ISO 45001(2018)
   Management System.
- Can be implemented at all levels of the organisation and is an effective management tool for all types of operations.
- The system is auditable and assurance tools, including performance indicators, are an integral part of the system. Independent auditing has shown a steady improvement in the adoption and performance of the standard in recent years.

#### **DEFINITIONS:**

- Fatalities includes contractors and employees;
- Near Miss Frequency Rate (NMFR) = total near misses recorded x 200,000 / hours worked;
- Total Recordable Injury Frequency Rate (TRIFR) = total injuries recorded (LTI+NLTI) x 200,000 / hours worked;
- Lost Time Injury Frequency Rate (LTIFR) = lost time Injuries x 200,000 / hours worked;
- Severity Rate = lost days x 200,000 / hours worked;
- LTIFR and Severity Rate include contractors.



# 

2020

WORK RELATED INJURIES NMFR, TRIFR, LTIFR, SEV FR				
	2019	2020	2021	
• NMFR – All	231.00	158.00	158.00	
NMFR – Employees	281.00	192.00	320.00	
NMFR – Contractors	152.00	92.00	40.00	
• TRIFR - All	0.31	0.32	0.33	
• TRIFR - Employees	0.35	0.38	0.36	
• TRIFR - Contractors	0.26	0.21	0.27	
• LTIFR – All	0.05	0.06	0.07	
• LTIFR – Employees	0.05	0.07	0.07	
• LTIFR – Contractors	0.05	0.03	0.06	
• SEV RATE – All	1.00	1.00	3.20	
• SEV RATE – Employees	1.50	1.10	2.10	
• SEV RATE – Contractors	0.30	0.80	5.30	
KEY				

NMFR – Near miss frequency rate
 TRIFR – Total recordable injury frequency rate

LTIFR – Lost time injury frequency rate

2021

## **SAFETY**





**CONFINED SPACE** 



**WORKING AT HEIGHTS** 



**FALLING OBJECTS** 



MOBILE EQUIPMENT



GROUND CONTROL





**HAZARDOUS MATERIAL MANAGEMENT** 



**MOVING EQUIPMENT** 



**ENERGY ISOLATION** 



LOSS OF CONTAINMENT



**EXPLOSIVES & BLASTING** 



**FIRES & EXPLOSIONS** 



**HUMAN BEHAVIOURS** 



#### THINK! SAFETY WORKPLACE PROGRAM

The THINK! Safety program is based on Crew Resource Management, the successful aviation safety program which focuses on teamwork, decision-making and communication. THINK! relies on problem-solving and is the embodiment of our Sensible Health & Safety strategy. It aims to enable and encourage critical thinking that is informed by our safety structures and processes. By combining knowledge with a common thinking process, we teach employees to take a sensible approach to risk management.



The THINK! Safety program allows the Health & Safety Management System (HSMS) to be implemented across all operations by providing them with the guidelines and tools to meet our objectives.

FQML has additionally launched a Digital Assessment Management System called SafeHub to house FQML's Health and Safety (Think!) training and communications content. SafeHub is an online repository providing users with access to all Think! related content in an organised and structured manner that saves users time, money and energy and provides access to the latest and most up to date safety content from across the organisation.

Training modules, toolbox talks, interactive games, posters, videos, and easy to roll out campaigns are all stored on SafeHub in multiple languages ready for use. This easy to search database will ensure FQML share knowledge and assist in improving safety on the ground by consistently ensuring we deliver impactful and engaging safety guidance to our employees.

# THINK! SAFETY IN OUR COMMUNITIES

The CSR program's initiatives and activities are consistent with international best practices and are carried out in a systematic manner across all sites. Our programs are specifically targeted to ensure sustainable community development, environmental and biodiversity and human rights.

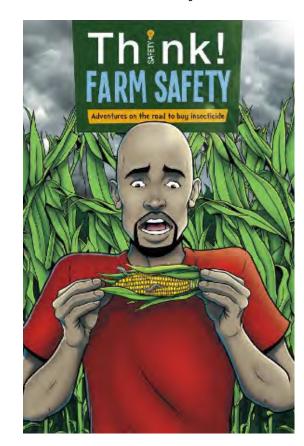
#### **ROAD SAFETY AWARENESS**

Approximately 1.3 million people die each year as a result of road traffic incidents, and between 20 and 50 million more people suffer non-fatal injuries. 90% of these occur in low to middle-income countries such as Zambia and Panama. FQML recognises this and is committed to educating the communities surrounding its operations

through its Think! Safety program by empowering community members to recognise the dangers and take decisions to keep themselves and their loved ones safe.

#### **AGRICULTURE**

Kansanshi's biggest project is converting 40 000 subsistence farmers into emerging commercial farmers which has been running since 2012. As part of the program, Kansanshi is also focused on educating farmers on best practices, including how to Think! Safety and be able to work safely.







08 SAFETY 27



#### **EMERGENCY RESPONSE & CRISIS MANAGEMENT**

#### **COBRE PANAMA ERT**

Cobre Panama has developed their "My Emergency Control" mobile application to coordinate better their Emergency Response Team's (ERT)efforts. By utilising the app, ERT is guaranteed more accurate data, which is crucial when trying to save lives.

To support the team, Cobre Panama have also purchased a new state-of-the-art KME ARFF fire truck. This technologically advanced vehicle, which contains features like an integrated communication system, will increase ERT's fire and rescue capabilities. Every second counts during an emergency and the KME ARFF fire truck will allow ERT to respond quicker and more efficient than ever before.



## TRIDENT'S AVIATION FIREFIGHTING EMERGENCY RESPONSE TEAM

In its quest to safeguard life and property around its mining operations and in communities neighbouring communities, FQM Trident Limited has partnered with the Zambia Air Service Training Institute (ZASTI) to train 14 Emergency Response Team (ERT) members in aviation firefighting.

The training conducted by ZASTI was in line with the International Civil Aviation Organization (ICAO) airport codes database, which is used in airline operations such as flight planning and air traffic control.

The 14 ERT members will be part of FQM Trident's 24-hour emergency fire and rescue team, which was set up by the mining firm in Kalumbila to safeguard people's lives and protect the growing communities near its operations, as well as the town airport.



#### **EMERGENCY RESPONSE TEAMS SUCCESS**

Emergencies can happen anywhere and at any time. The very nature of an emergency is unpredictable and can change in scope and impact. Being prepared and planning ahead is critical to protecting lives, the environment, and property. To this end, our Emergency Response Teams (ERT) and Crisis Management Teams train hard to ensure all team members are physically and mentally fit and able to make potentially life-saving decisions under extreme pressure.

This hard work and dedication has recently paid off with our Çayeli Bakir Mine Rescue Team in Turkey winning the inaugural Turkish Mine Search and Rescue Competition and our Kansanshi & Trident Emergency Response Teams coming first and second, respectively in the annual Zambia Inter-Mine ERT competition.







# TAILINGS STORAGE FACILITIES

#### **DAM SAFETY MANAGEMENT**

In an effort to mitigate the potential risk, operational controls are in place at each of our TSFs including:

- TSF management reviews are reported directly to the EHS&CSR Committee;
- Quarterly or annual inspection, risk review and reports by independent dams specialist;
- Appointment of competent persons at the site to manage the facility with all reporting directly to the Mine Manager;
- Operating, maintenance and surveillance manuals for each TSF;
- Dam breach and inundation studies at all active and closed TSFs. The results of the dam breach studies are used to improve the early warning system and response plan in the unlikely event of a TSF failure;
- Emergency Response Plans for each TSF. Public sectors will be engaged to assess the capability of the Emergency Preparedness and Response Plan. This will include transparently informing local authorities and collaboration with national emergency response agencies;
- Regular inspection by the day to day operators with oversight from senior management;
- Close monitoring of the volume of water held in the TSF with particular

attention to embankment freeboard and drainage;

- Regular surveys and levelling on all embankments;
- · Use of drones for aerial surveillance;
- Installation of instrumentation including piezometers (to measure the level of the phreatic surface) and slope and settlement gauges continues to expand and improve with advancing technology to provide detailed feedback on the developing embankment performance;
- Interpretation of piezometric and associated data by external consultants on an annual basis or more frequently as required by site conditions:
- Embankments regularly inspected for erosion, seepage, freeboard and slumping;
- Groundwater quality monitored via peripheral water monitoring bores;
- Group technical staff regularly inspect the TSFs and review operations with site management with a focus on continual improvement.

First Quantum has disclosed information on all of its active and closed TSFs as requested by the Church of England Pensions Board. This information is updated annually and is available on the Company website www.first-quantum.com.







First Quantum manages 19 Tailings Storage Facilities (TSF), of which 10 are active and 9 are closed. The Company takes the management of TSF and dams extremely seriously. All of our facilities are subject to close monitoring by site and group management as well as regular external audit. In addition to national legislation in the country in which the facility is built, all our TSFs have been designed and are operated in accordance with the guidelines issued by either the Australian National Committee on Large Dams (ANCOLD), the Canadian Dam Association (CDA) or the European Union Legislative Directives.

In 2021, the company thoroughly reviewed the Global Industry Standard on Tailings Management (GISTM) developed by the International Council on Mining and Metals. We support the standard's intent to improve the industry's performance on tailings management. First Quantum is committed to a phased approach in aligning our operations with the performance aspects of the GISTM in order to maintain our track record in tailings management.





Total

# TAILINGS STORAGE **FACILITIES**

#### **TSF DESIGN AND CONSTRUCTION METHODS**

First Quantum's Tailings Storage Facilities (TSFs) are designed in accordance with the guidelines of the Australian National Committee on Large Dams (ANCOLD), the Canada Dam Association (CDA), and European Union Legislative Directives. The TSF guidelines used depend on the location and jurisdiction.

When determining the appropriate type of TSF for a project, it is important to consider local conditions and the physical and engineering properties of the tailings. Hard rock copper tailings typically settle, drain, consolidate and gain strength over time. Cyclones are used to separate the tailings into a coarse and fine fraction on the embankment during deposition. Preferential deposition of the coarser material from the cyclone underflow onto the embankment creates a free draining, competent and stable construction material while the fine fraction, and the majority of the water delivered with the tailings, flows towards the centre of the TSF. In this way, the embankment phreatic surface (level of saturation) is kept lower which helps to maintain embankment stability well above the lower design limit.

Based on these properties, First Quantum has adopted two main approaches to embankment design and construction using cyclone tailings, namely the upstream and centerline methods. These designs are industry best practice and used widely and successfully in hundreds of mining operations around the world. However, regardless of the design and construction, it is imperative that the TSF is operated within the design constraints. First Quantum's senior management and its engineering staff work closely with the operators of each TSF (i.e. each project) to ensure the facility is managed and operated within the design constraints.

A third TSF construction method is used at our Cobre Las Cruces copper mine in Spain. At Cobre Las Cruces the tailings are dewatered using a filter press (12% moisture content) and transported by articulated dump truck to the TSF where the 'dry' tailings are placed.

The TSF construction methods used at our major operations, upstream at Kansanshi and Sentinel in Zambia and centerline at Cobre Panama are shown in the following illustrations.

In 2021, the Company thoroughly reviewed the GISTM. As a result, First Quantum has committed to a phased approach in aligning our operations with the GISTM. As part of the phased approach we have prioritized alignment with the core components of the GISTM.

# **UPSTREAM TAILINGS DISCHARGE** POND BEACH **TAILINGS** STARTER DAM

Coarser tailings from the cyclone underflow is deposited in a planned manner to continually raise the outer TSF embankment, whilst the finer tailings from the cyclone over flow is discharged from the created embankment towards a central decant pond. A minimum length of fine tailings beach above water is one criteria used to ensure an adequate foundation strength to support ongoing upstream raises. In this manner, the embankment crest line moves progressively inwards as the TSF develops. The rate of rise of the embankment is typically maintained at less than 2m per year to allow the beached fine tailings to desiccate and gain the required strength. This method of construction is used extensively around the world and within the First Quantum group. Properly executed, upstream construction can provide an economical embankment with a high factor of safety.

#### **KANSANSHITSF 1**

Upstream construction using cycloned tailings. The TSF was designed to have a rate of rise of less than 2m per year (and in practice is typically lower than this).

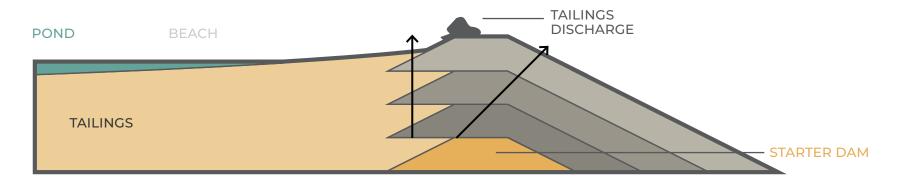
#### **KANSANSHITSF 2**

Upstream construction using cycloned tailings. The TSF rate of rise is around 1m per year.

#### **SENTINEL TSF**

Upstream construction over a 17 km long perimeter embankment. The TSF has a rate of rise of 2m per year.

#### CENTRELINE



Centreline construction is where the existing embankment crest is maintained on the same centerline as the TSF increases in height. The majority of the coarser cyclone underflow is placed downstream of the crest centerline and is supported by natural ground that has been suitably prepared to provide a stable foundation. The balance of the coarse sand is deposited from the cyclone underflow onto the previously constructed fine tailings beach in a similar manner to upstream construction. Factors in selecting this centerline method may include higher tailings production rates, economically available material for embankment construction or site conditions are more complex to manage using upstream construction.

#### **COBRE PANAMA TSF**

Centreline construction is an inherently safe form of construction.



## INCLUSION AND DIVERSITY

We find strength in our differences. First Quantum's culture and success is founded on doing things differently. This means encouraging an inclusive and respectful environment where alternative and differing ideas and perspectives are embraced. We expect our people to speak up and challenge the established way of doing things to enable us to continually improve and develop as a Company. Our diversity allows us to recognize the distinct and different needs of those around us.

We operate in a heavy industry environment against very diverse cultural backdrops where women have historically had low representation. The ability to attract women into this environment can prove challenging, however we recognize the benefits that come with developing women to work in heavy industry and we remain focused on the importance of our training and development programs designed to improve the representation and advancement of women. Furthermore, concerted efforts are being made in recruitment, promotion, and developmental reviews to reduce the gender inequality gap as well as a focus on reviewing our internal metrics across the business to establish the capability to better measure, track and report on our progress.

As a Company with operations in 7 countries, and a presence in 17 countries, we play an important role in the economies of our host countries. The following breakdown of data aims to show the geographical representation of our workforce and our optimal use of available labour and skills within our host countries, with the aims of contributing to local employment and advancement of skills in our host countries. During 2021 our workforce consisted of 17 845 employees.

1196
FEMALE WORKFORCE

30%

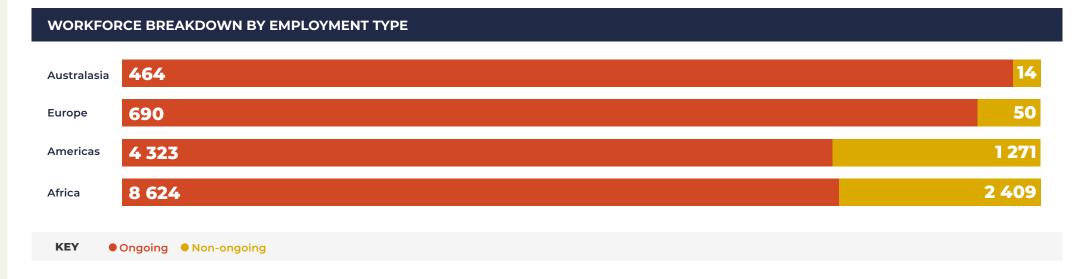
FEMALE REPRESENTATION on the board



94%

# WORKFORCE ARE NATIONALS

in the countries where our operations are located



#### TOTAL BREAKDOWN OF WORKFORCE BY GEOGRAPHY AND REPRESENTATION OF NATIONALS IN WORKFORCE FOR THE REPORTING PERIOD

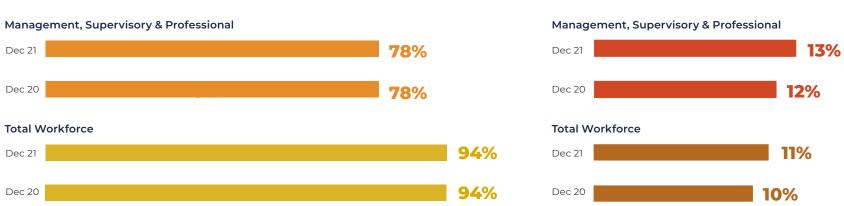
#### **TOTAL WORKFORCE BREAKDOWN BY REGION**

NationalsOther





# PERCENTAGE OF NATIONALS AT DIFFERENT MANAGEMENT LEVEL PERCENTAGE OF WOMEN AT DIFFERENT MANAGEMENT LEVEL



INCLUSION & DIVERSITY 31



## **OUR PEOPLE**

#### **CULTURE**

From the Company's inception in 1996, First Quantum has grown to become one of the leading global producers of copper. We are immensely proud of our operations and our technical achievements and also the culture that we have built and that characterizes First Quantum today.

We expect our people to think for themselves and we're not afraid to give greater opportunities to our people who want responsibility. With this we seek to give our workforce the chance to achieve their full potential by taking their skills and experience to the next level and the prospect of growing developing their careers.

# OPPORTUNITY AND FAIRNESS

We treat our employees fairly and with respect. We promote inclusion and diversity in the workplace and strive to provide an environment that offers equality of opportunity, is free from harassment, violence and intimidation. Our employment policies adhere to domestic laws and are consistent with internationally accepted labour standards, including ILO Declaration on Fundamental Principles and Rights at Work and the Guiding Principles on Business and Human Rights - implementing the UN "Protect, Respect, and Remedy" Framework.

We pay competitive wages and benefits, which more than satisfy national legal standards or local industry benchmarks. In countries where no minimum wage legislation exists, we seek to establish a living wage equivalent that provides a good standard of living for our employees. In the absence of collective bargaining agreements, we regularly perform market benchmarking to ensure the competitiveness of our pay. Where fiscal circumstances of the host country may erode the standard of living, semi-annual pay reviews are also undertaken.

The use of misleading or fraudulent practices to recruit employees is prohibited and First Quantum conducts awareness campaigns to highlight this to the areas in which our workforce are based and where this is assessed as a potential issue.

8%
TOTAL WORKFORCE

3% VOLUNTARY

TURNOVER

5% INVOLUNTARY

As the Company's Spanish and Turkish operations approach the end of the mine life, headcount has started to reduce. Following completion of initial project construction and commissioning at Cobre Panama, the number of projects employees has also reduced. The competitiveness of the Australian labour market, partly due to COVID-19 restrictions, has also

contributed to the turnover rate.

**COMPANYWIDE** 



98%

COMPLETION OF CODE OF CONDUCT TRAINING

2/3

WORKFORCE COVERED BY COLLECTIVE LABOUR AGREEMENTS

**COBRE PANAMA** 



5 253

**RECEIVED** 

ENVIRONMENTAL TRAINING

3 811
RECEIVED
PERSONAL FINANCE

**SENTINEL** 



2863

**RECEIVED** 

MINING MOBILE
OPERATIONS TRAINING

2 661
RECEIVED

MAINTAINENCE AND ENGINEERING TRAINING

**GUELB MOGHREIN** 



6 MONTHLY TRAINING

FOR ALL MINING
OPERATIONS STAFF IN
SAFETY LEADERSHIP,
EQUIPMENT OPERATIONS
AND PRODUCTIVITY AND
PERFORMANCE KPIS

#### **CASE STUDY - KANSANSHI**

At the Company's Kansanshi mine, training and developing the potential future Zambian leaders doesn't start at the mine gate. In 2021, Kansanshi invested more than \$2 million across a wide range of initiatives targeting improved education and development opportunities in Zambia. These ranged from A-Level scholarships and graduate programs to trade schools providing students with the skills necessary to establish mining careers, through to employee study assistance programs and the General Managers programs aimed at the Company's high performing employees. In 2021, Kansanshi provided the support for training and development of almost 300 students, 45% of them female.





10

TRAINING



COVID-19 RESPONSE

The impact of the global pandemic has been different in each of the countries we work in. It has been in Zambia, Panama, and Mauritania where we have been most active in supporting and augmenting the government's responses to COVID-19 as we support our host communities. In addition to increased medical facility resilience, initiatives at the mine clinics in Mauritania, Zambia, and Panama, COVID-19 protective measures to minimize person to person transmission in the workplace and protect business continuity have been implemented across all our operations.

#### **PANAMA**

The Company has been very active in supporting the Ministry of Health of Panama, MINSA, with access and supplies into surrounding communities.

Response of the Gorgas Memorial Institute for Health Studies, a medical research institution that has been dedicated for more than 80 years on investigating diseases in the tropics and preventative medicine in order to fulfill its role as a national public health laboratory. In April 2021, the Gorgas COVID-19 Institute was opened and now provides advanced genetic sequencing of

Coronavirus samples to help track its mutation and spread in the country. Cobre Panama has also provided direct support, including emergency livelihood packages to support its surrounding villages and communities.

In response to the pandemic, the Company developed the CobreSafe app, which has been recognised by Microsoft on its Customer Stores website, for our Cobre Panama workforce. This app enables COVID-19 health monitoring and improves workforce safety through traceability in real time of potential cases at the mine.

#### **COBRE PANAMA**

Cobre Panama delivered 500 COVID-19 tests to the Miguel de la Borda Health Center to provide the health facility with the necessary supplies to detect possible cases of COVID-19 in the community. This donation was made through the Cobre Panama Contigo program.

Also, through the Cobre Panama Contigo program, transportation and logistical support was provided to voluntarily transfer residents of the neighboring communities in Donoso, Omar Torrijos and La Pintada to enable them to receive vaccinations against COVID-19.

Cobre Panama Contigo is our health and safety program in response to COVID-19, whose objective is to protect our employees and our neighboring communities.

#### ZAMBIA

The company has provided testing and medical equipment, and assisted with the construction of COVID-19 isolation facilities for the community.

Ongoing support includes the provision of oxygen produced by the Kansanshi Smelter which supplied oxygen as far as Lusaka as well as the neighbouring provinces. Furthemore, the Company provided essential consumables, face masks, sanitation stations, and transportation of medical supplies.

The Company is working with the Ministry of Health in the northwest province to provide vaccination stations to employees and affiliated contractors in support of the national vaccination program.

#### KANSANSH

When schools around our Kansanshi mine closed because of the threat from COVID-19, the Kansanshi Foundation spearheaded the Schoolon-Radio initiative, a radio schooling program aimed at bridging the education gap among primary school-going children.

Courses were delivered remotely via two FM radio channels. Teachers from around the region, broadcasted 12 hours a day, engaging some 42 000 students.

#### **MAURITANIA**

The Inchiri Health Department in Mauritania rolled out COVID-19 vaccinations in regional areas, supporting communities who otherwise would not have access to the life-saving vaccine. First Quantum provided essential logistical support to this important program by supplying 4x4 vehicles to allow medical professionals to safely access remote locations across the country, ensuring an equal opportunity to healthcare for all.

In response to the ongoing COVID-19 pandemic, First Quantum has maintained the health and sanitary protocols at our operations and local communities across the world.

Our proactive response to COVID-19, in compliance with both local and international guidelines, is specific to each country. Our goal is to prevent or reduce the transmission of the virus on our sites and in local towns or villages in each region, while the health and well-being of our workforce and communities continues to be a priority.

The Company has also redesigned ways of working, with staggered rosters, remote working and bubble concepts on site to continue operations while limiting the potential spread. As cases are identified amongst the workforce, they are contained and isolated according to the established protocols and in coordination with local health authorities with limited impact to operations.

The Company has focused on actions and campaigns to maximize vaccination rates and to plan booster vaccination campaigns for 2022. We continue to work with local communities to develop support processes and encourage vaccination.





manner across all sites.

Our commitment to local stakeholder engagement is laid out in our Community Engagement Policy, which describes our community engagement principles:

#### RESPECT

First Quantum strives for relationships that are based on transparency, mutual trust and respect. We recognize that our activities affect or could affect stakeholders, local communities, their culture, traditions and current uses of lands and resources.

#### **ENGAGEMENT**

First Quantum commits to listening and communicating with stakeholders and local communities directly and openly about events, issues and ideas. We seek to consult and resolve grievances in a timely, interactive and culturally appropriate manner.

#### BENEFIT

We recognize that people and communities affected by our business should benefit through opportunities such as employment, business development, education, training or community investment over the long term.

To deliver on these principles and adhere to our Social Responsibility Policy commitments, we undertake the following actions:

- Develop strategies and programs that build capacity in local communities, and enhance their ability to benefit from economic opportunities associated with mining development;
- Commit to local communities' participation in our workforce through employment and contracting opportunities;
- Strive to ensure local contractors can provide safe, reliable and competitive goods and services to our operations;
- Collaborate with communities to identify community investment opportunities that support local cultures and priorities.

These actions are guided by our Human Rights Policy, which is guided by the principles of internationally recognized human rights norms, including the International Labour Organisation (ILO) Declaration on the Fundamental Principles and Rights at Work, and the United Nations (UN) Declaration on the rights of indigenous peoples.

We are also committed to conserving natural resources and minimizing environmental impact at all of our locations.

The EHS&CSR Committee has the responsibility to review and monitor the effectiveness of our community engagement efforts.

Management of First Quantum's community engagement is overseen by a site and group level management, who provide clear, focused guidance on local community relations activities and who ensures that First Quantum's corporate standards on community engagement are met. The Company's internal audit function periodically reviews site practice against corporate expectations. Each operation is staffed appropriately to manage community relations, including a local community relations manager.



# LOCAL COMMUNITIES

#### **COMMUNITY RELATIONS**

Each of our projects and operating sites has a comprehensive community relations program, appropriately staffed, to engage with communities affected or perceived to be affected by our activities or who have a genuine interest in the performance of our business. We engage in broad based community consultation, both formally and informally. First Quantum regularly engages with governments at national, regional and local levels, international development organizations, civil society organizations, not-forprofit organizations, traditional leadership and community-based organizations such as women's groups, chambers of commerce, religious institutions and local development organizations, indigenous peoples and vulnerable peoples in addition to international and local academics.

#### **COMMUNITY RELATIONS**

All of our operating sites participate in broad based local consultation committees. Key topics, interests and concerns raised include local hiring and contracting opportunities, community funding, community participation in mining activities or programs, environmental issues including water and biodiversity management as well as issues related to community development, taxation and wealth distribution.

Engagement is continuous and ongoing as shown in our stakeholder maps and engagement activities.

#### **GRIEVANCE MANAGEMENT**

In addition to ongoing dialogue, each of our operations and projects has a fully functioning grievance mechanism used to accept, assess and resolve concerns and complaints from communities related to Company activities, These mechanisms are designed to ensure that grievances are responded to in an effective and timely manner.

Each mechanism is culturally appropriate, free and readily accessible. We register, classify grievances,

and assign responsibilities and timelines for addressing grievances.

All complaints received through our formal mechanisms were addressed within timeframes prescribed by each site's procedures.

#### **SOCIAL IMPACT**

Each of our projects and operations conducts ongoing social impact reviews to proactively and actively manage these impacts to the greatest degree possible. This is an ongoing activity focused on identifying, assessing, mitigating and enhancing outcomes for host communities and is embedded in community engagement and development activities and informed by community baseline studies.

Our engagement informs our community programs which, in collaboration with our communities and host governments, seek to enhance their livelihoods in a sustainable way that will outlast the life of mine.

Formal Social Impact Assessments have been conducted as part of the process required for project development. Impact Assessments are also embedded into Resettlement Action Plans.



# COMMUNITY DEVELOPMENT

#### **OUR APPROACH**

Each of our sites has a community social and economic development plan which is aligned with the UN SDGs and the national development strategies for host countries. We seek to ensure that the positive economic impacts of mining are realized and to assist in improving the quality of life for those people and communities impacted by our activities. Plans are made according to legal requirements, community needs and business opportunity and risk. We are continually refining our social investment strategy to best address community needs, local workforce development, local business and infrastructure development in a manner that benefits communities. Through partnerships with government and civil society, we seek to ensure that the benefits of mining extend beyond the life of our operating sites, so that we leave a positive impact on the national environment, climate change and social capital.

#### **OUR PERFORMANCE**

As part of First Quantum's corporate social performance strategy we support host communities and governments, helping to tackle social challenges and collaborate on solutions that enhance growth and prosperity. We develop human and economic capital by providing jobs and skills training and by promoting local procurement. Furthermore, we build physical infrastructure and institutional capabilities thereby helping to create more resilient communities.

The COVID-19 pandemic was particularly impactful on our local communities. Our community development programs had to pivot from supporting initiatives requiring group gatherings to providing remote and direct support.

HUMAN RIGHTS VIOLATIONS

First Quantum and the contractors we work with worldwide have maintained this inflexible standard every year since our founding.

\$31m

First Quantum invests in range of community programs in the regions around our operating sites.

\$1.6bn

CONTRIBUTION

Direct contribution to the governments of our host countries.





20 million



















## COMMUNITY DEVELOPMENT SOCIAL PROJECTS – ZAMBIA

## **CSR AWARDS**

Kansanshi and FQM Trident were honored with 6 awards from the Zambia CSR/ CSI Responsible Business Awards

#### **KANSANSHI RECEIVED:**

CSR Excellence in Literacy Support award for its Adult Literacy Program

Community Social Impact award for its Youth Development Program in Conservation Farming while working with the differentlyabled in Solwezi.

### **FQM TRIDENT RECEIVED:**

Environmental Stewardship award for its animal/ fish restocking and environmental action targeting pupils in local schools.

CSR Excellence Award in Public Health and Safety Initiative for its deep borehole and water tank projects in Kisasa,

Disaster Responsiveness Award for a new 24hour emergency fire and rescue station it put up in Kalumbila,

Trident Foundation was awarded the 2021 company of the year Corporate Social Responsibility award for its community initiatives and support programs.

9 200

TONNES OF MAIZE GROWN IN 2021 BY CONSERVATION FARMERS

40 000

FARMERS SUPPORTED TO DATE

7700

DAILY MEALS

42 000

STUDENTS ENGAGED THROUGH RADIO SCHOOLING PROGRAM

**250** 

STUDENTS AND INTERNS SPONSORED

2000

ENTREPRENEURS TRAINED

## **CONSERVATION FARMING**

First Quantum organizes workshops to teach local farmers basic business principles and their application to high-value crop farming as a sustainable source of income. The goal of the project is to promote food security in the mine's areas of operation while also enabling local communities to become economically independent. The conservation farming program is now in its 10th year of operation, helping nearly 40 000 farmers in Zambia provide for their families and their country. During 2021 the conservation farmers grew a record 9 200 tonnes of maize and as a result were able to invest more in improving their homes and furthering their children's education.

## **DAILY MEALS AND NUTRITION**

First Quantum has provided daily meals to about 7 700 undernourished schoolchildren, including 500 in early childhood development classes. This has led to significantly improved attention spans and an average 30% gain in academic performance. Under its School Improvement Program, the company is also supporting a Continuous Professional Development program, where teachers are provided with training on modern teaching methods.

## SCHOOL-ON-RADIO PROGRAM

The Kansanshi Foundation spearheaded the Schoolon-Radio initiative, a radio schooling program aimed at bridging the education gap among primary schoolgoing children which was a result of schools around our Kansanshi mine closing due to the COVID-19 threat. Courses were delivered remotely via two FM radio channels. Teachers from around the region, broadcasted 12 hours a day, engaging some 42 000 students.

## **SCHOLARSHIP PROGRAM**

As Zambia's largest private sector employer, we understand the importance of job focused skills training. Therefore, beyond public schooling First Quantum's has established a scholarship program. Annually we sponsor about 150 students and interns in various trades and vocational training programs. Several recent classes have been 100% young women, as we do our part to address the gender imbalance in mining and secondary industries that support it.

## LOCAL BUSINESS DEVELOPMENT

In addition to education development, local business development has been a key focus for First Quantum. Over 2 000 entrepreneurs in Solwezi were trained in 2021 in basic business development techniques through a radio platform hosted by Kansanshi Mining Plc and Fortune World Investments. These workshops, which were also run on social media, under the theme 'Changing the Business Mindset', aims to build employment capacity, enhance business growth and sustainability independent of mining activities as well as help formalise participants' businesses. Whilst also enhancing small and medium enterprises (SME) participation in key sector value chains, which is critical to building economically independent communities in rural areas.

## JIMUKA! PROGRAM

One of the factors that cause girls in Zambia to cut their education short is menstruation. For many girls without basic feminine hygiene supplies, they stay home for several days each month to avoid embarrassing accidents at school. As a result, they fall behind in their studies and in some cases give up on school entirely. First Quantum sponsors the Jimuka! program that provides girls with feminine hygiene products. The program also arranges motivational talks by successful female professionals and entrepreneurs, who serve as role models for young girls while emphasizing the value of education.















200

LOCAL FARMERS PART OF THE DONLAP INITIATIVE

123

**ENGAGED THROUGH** FIRST QUANTUM'S SMALL **BUSINESS TRAINING COURSE**  575

WOMEN PARTICIPATED IN LITERACY PROGRAM

FOR THE CONSTRUCTION OF THE INDUSTRIAL PROFESSIONS TRAINING CENTER

## **PANAMA**

## **Association of Donoso and La Pintada Producers (DONLAP)**

At Cobre Panama, we consume products that come directly from our neighboring communities. The Association of Donoso and La Pintada Producers (DONLAP), made up of nearly 200 local farmers and several dozen small groups, is now one of our most important suppliers of fruits and vegetables. Cobre Panama works with more than 1850 local Panamanian suppliers with whom we contract services for more than \$500 million annually. Cobre Panama purchased \$2 million of produce from DONLAP in 2021.

## **Protection measures: Everything** related to the protection of women

First Quantum in collaboration with our local partners trained 30 women from the community of Coclesito and its surroundings with the theme "Protection measures: Everything related to the protection of women" Initiative. Cobre Panama works to teach women in their workforce and surrounding communities to identify if they or someone close to them is a victim of gender violence or domestic violence and to understand

### Las Estrellas de Colón Soccer **Kit Sponsorship**

Aimed at the development and wellbeing of its neighboring communities, Cobre Panama delivered uniforms and cleats to the boys of the Omar Torrijos Herrera district who participated in the soccer cup Las Estrellas de Colón Soccer Kit Sponsorship, an event that seeks to discover sports talents on the Atlantic Coast. Cobre Panama sponsors soccer schools that are attended by more than 300

### **Profession Training Centre Investment**

In our commitment to develop future talent, Cobre Panama invested \$4.3 million for the construction of the Industrial Professions Training Center of Cobre Panama. The training program was inaugurated in 2019 and is currently training 40 students of which 30% are women. First Quantum provides tuition, transportation and a monthly stipend

In 2021, the team at Cobre Panama hosted 26 reforestation days and, with the help of approximately 8 000 volunteers, planted 20 000 seedlings that were grown in the Cobre Panama nursery.

## **MAURITANIA**

### **Inchiri Health Department Support**

The Inchiri Health Department in Mauritania rolled out COVID-19 vaccinations in regional areas, supporting communities who otherwise would not have access to the life-saving vaccine.

#### **Small business training course**

First Quantum provided essential logistical support to this important program by supplying 4x4 vehicles to allow medical professionals to safely access remote locations across the country, ensuring an equal opportunity to healthcare for all 123 women in Mauritania are on their way to financial empowerment after completing First Quantum's recent small business training course. In order to prepare for this course, the women completed our six month literacy program and can now add a range of practical business skills to their resume.

#### **Akjoujt Literacy Program**

At First Quantum, we know supporting women is about more than just employing them, it's about empowering women everywhere. One of the ways we do this is through our Literacy Program in Akjoujt, which has enabled 575 women to become literate since its launch in 2015. This program offers women opportunities to gain education and independence through writing, reading, numeracy, religious, civic and health lessons. It is accessible, being taught across six designated centers



## **COMMUNITY DEVELOPMENT -INFRASTRUCTURE**

First Quantum is committed to building strong communities around our operations by investing in communities and public services. In addition, we have funded a range of infrastructure projects in our host communities to provide long-term benefits to the community. As with our social initiatives, our investment into infrastructure is undertaken in line with our "shared value" approach to ensure a lasting positive impact outside mining activities in host communities.

## ZAMBIA

#### Kansanshi

Since the beginning of operations at Kansanshi in 2005, and as part of the construction of Sentinel, First Quantum invests in development projects in Zambia aimed at delivering long-term enhancement of infrastructure within our host communities.

The wide range of infrastructure projects that we have delivered to date include:

- · Roads (including the Solwezi-Chingola highway)
- · Construction and maintenance of

- 3 Early Childhood Development Centres in Solwezi
- · Rehabilitation of the regional library in Solwezi
- · Community health clinics, hospital facilities, classroom blocks and schools in and neighbouring Solwezi and Kalumbila Town
- · Water purification and sewage treatment facilities in Kalumbila Town
- · Kalumbila Town international airport

Most recently Kansanshi has partnered with the Solwezi Municipal Council to work together in improving roads in Solwezi. In 2021, 3.2 km of the road network was upgraded to bituminous standard.



## SENTINEL

## **Educational Community** Infrastructure

Constructed through the Trident foundation and in collaboration with the community, First Quantum has invested in quality education through the construction and renovation of schools near our Sentinel mine. Our projects to date include:

BY 3 CLASSROOM



### KISASA WATER

As part of its ongoing commitment to bring fresh clean water to local communities, First Quantum has invested in two commercial boreholes for the Kisasa community, close to Sentinel.



The boreholes are 130 meters deep with two 32 000 litres, 15-metre high storage tanks, connected to a distribution network to 62 communal taps that will supply water to more than 8 000 people of Kisasa.

#### **KASOMBO BRIDGES**

The Trident Foundation has handed over two bridges in Chipawa village. The construction of the bridges, in collaboration with the community, on the Kasombo river commenced in 2020 after both the main bridge and the makeshift footbridge collapsed, posing a risk to community members.

## **PANAMA**

Cobre Panama has spent approximately \$4 million on infrastructure development projects during 2021.

Projects achieved to date include:

- Over 45 km of roads were built allowing people in the communities to reduce their transport time from 8 hours to 1.5 hours allowing access to regional hospitals and supermarkets.
- Construction of 4 bridges to reduce the travel time of people in the communities and provide safer road infrastructure.
- · 6 schools have been built and an

additional 12 have been renovated in our neighbouring communities.

- Rural aqueduct systems have been built or improved in our host communities providing potable water for more than 20 000 people.
- Over \$250 000 has been spent on cables, posts, and towers which provides cell phone coverage and internet access to our surrounding communities.

## **MAURITANIA**

#### **BENICHAB PIPELINE**

In Mauritania, First Quantum provides water to households and businesses in Akjoujt,

which is home to approximately 15 000 people, as well as to residents of nearby deserts settlements through storage tanks from our Benichab pipeline.

This pipeline also aids nomadic livestock herders and people living in more remote villages around our operations. Our long-term goal, as the Guelb Moghrein nears closure, is to hand over all water infrastructure to the Government of Mauritania – after working to ensure that local officials have the necessary equipment and expertise to maintain it into the future.















## **COMMUNITY DEVELOPMENT HEALTH & WELLNESS - ZAMBIA**

First Quantum has had a longstanding commitment to support the communities surrounding our mine sites, the initiatives driven through the First Quantum Health & Wellness is a continuation of this support.

First Quantum Health & Wellness which is a multidisciplinary department focused on providing holistic health and wellness services to Kansanshi and Sentinel mines and their associated communities. with the aims to support the existing government health system in the provision of essential public healthcare services.

The public health services initiatives undertaken by First Quantum's Health & Wellness include but are not limited:

- · Epidemic Preparedness
- · HIV/Sexually Transmitted Infections (STI)/Tuberculosis (TB)
- Malaria
- · Non-Communicable Diseases
- Water Sanitation and Hygiene (WASH)
- · Child Empowerment Adolescent School program (CEASP)





## THE BUTUNTULU BWA NYAUNDA PROJECT

The Butuntulu Bwa Nyaunda (BBN) project is a community health and wellness initiative, which seeks to improve the health status of people living in the surrounding areas of the Sentinel Copper Mine run by FQM Trident Limited and Kansanshi in Solwezi District. The BBN initiative was rolled out to support the existing government health system in the provision of essential healthcare services. The program will drive all the seven public health pillars and consistently support 19 clinics in surrounding communities.

The objectives of the BBN are to:

- · Mitigate negative health impact and risks to the community which may be associated with the mining project.
- · Contribute to improving the quality of health care services and the provision of these as close to the First Quantum dependents as possible

- · Identify opportunities of system strengthening
- · Contribute to improvement of key public health indicators in the province
- · Use this project to enable other community programs thrive i.e community Health programs and other CSR programs.
- · Collaborate externally with other organizations implementing health programs at these facilities

During 2021 the BBN project focused on the following:

- · Epidemic Preparedenss and Control
- · HIV/AIDS/STIs/TB
- Malaria
- · Non-communicable Diseases
- · Water Sanitation and Hygiene
- · Child Empowerment Adolescent School program
- Community Health

## 658

PUPILS PARTICIPATED IN THE SOCCER TOURNAMENT FROM 20 CATCHMENT SCHOOLS AS PART OF CHILD EMPOWERMENT ADOLESCENT SCHOOL PROGRAMS

160

**CERVICAL CANCER** SCREENING UNDERTAKEN

STRATEGIC COMMUNITY MEMBERS -TEACHERS, COMMUNITY HEALTH WORKERS TRAINED IN KEY HEALTH ISSUES E.G. NUTRITION, MALARIA

**CLINICS IN SURROUNDING** COMMUNITIES SUPPORTED AND SEVEN PUBLIC HEALTH PILLARS DRIVEN THROUGH THE SUPPORT OF BBN

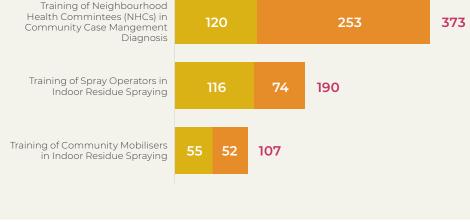
ZAMBIAN SCHOOLS AND HEALTH FACILITIES SUPPORTED

182 728

NUMBER OF PEOPLE REACHED THROUGH AWARENESS PROGRAMS

# 956 PEOPLE RECEIVED HEALTH TRAINING WHICH INCLUDED:

**2021 COMMUNITIES HEALTH TRAINING INITIATIVES** 



33 000

Male

STRUCTURES SPRAYED IN MALARIA PREVENTION PROGRAMS

Female

INDOOR OF HOUSES SPRAYED (INDOOR RESIDUE SPRAYING)

25 657

NUMBER OF TARGETED HOUSES FOR SPRAYING (INDOOR RESIDUE SPRAYING)





programs. These are documented in our Social

as required by law. We will continue to promote

for the UN SDGs, as human rights serve as the

foundation of the overall SDG framework.

**Impact Assessments and Resettlement Action Plans** 

human rights within our sphere of influence. This is

especially important in the context of our support

suppliers, including contractors, who maintain

zero tolerance for human rights violations and

we may terminate a contract of any provider

All security service providers are required to

abide by the VPSHR code of conduct and to

quarterly certification declaring that they (1)

induct and train all new employees on these

principles and (2) monitor the adherence to

these principles by their employees.

who breaches the law, the First Quantum Code of Conduct or First Quantum policies.

HUMAN RIGHTS 42

difference. We believe that no single right can

be considered separately from the others, and

that all people are entitled to a life free from

Our approach to human rights is guided by

internationally recognized principles and

· Universal Declaration of Human Rights

· Voluntary Principles on Security and Human

· ILO Declaration on Fundamental Principles

discrimination and harassment.

standards, including:

Rights (VPSHR)

and Rights at Work







## RESETTLEMENT

#### **OUR PERFORMANCE**

## **COBRE PANAMA**

The resettlement plan for the Cobre Panama Project was developed through extensive stakeholder consultations. The resulting agreement was the product of good faith negotiations based on internationally accepted principles of free, prior and informed consent (FPIC). As of January 2017, all from Petaguilla community moved voluntarily to Nuevo Eden as per their resettlement agreement. Previously resettled communities have adapted to their new communities and are now successfully subsisting on their own farming outputs. Following the completion of the resettlement, the Company adhered to the IFC Performance Standard 7 recommendations that resettlement be monitored until year 3, and is now focused on the development and support of livelihoods through agroforestry, agricultural, eco-tourism and textile programs. The Company's objective is to create the same number of jobs through these programs as the number of local employees working at Cobre Panama.

## ÇAYELI

Voluntary resettlement is ongoing at Çayeli as part of the Near Mine Housing Project. For a number of years local residents have complained that blast vibrations from the mine have damaged their homes. Expert studies were commissioned in 2013 and while no causation was established, heavy precipitation and naturally-occurring ground movement led to Çayeli undertaking a voluntary resettlement process for people living in damaged houses. To-date 93 households have participated in the process: 84 have been resettled, 5 have received formal offers and 4 are having their homes monitored for damage and monitoring is ongoing.

93 Households participated

Monitored for damage

84
Households
resettled

5 received formal



## **HAQUIRA**

First Quantum has been engaging with communities influenced by the Haquira project in Peru since 2011. In early 2020, the Company commenced actual discussions on land rights and resettlement with the communities of Huanacopampa, Ccahuanhuire, Lahuani, Cconchaccota, Llamahuire, Ccarayhuacho and Pararani. The Company has presented a proposal to each of the above communities and received counter proposals from all except Pararani. For the next two years, the focus will be on an exploration and drilling program to confirm the reported resources and to explore other potential areas. Negotiations regarding land acquisition will continue though progress is expected to be limited as the newly elected Peruvian government considers a new mining code.

## TACA TACA

At Taca Taca in north-western Argentina, as part of an EIA, a communications plan has been designed and information meetings held with the populations closest to the project. We have commenced the process of FPIC as required by Argentine laws through the Secretaria de Asunto Indigenas, the ultimate authority on indigenous peoples. The Secretary issued a statement identifying three communities from whom FPIC should be sought: Olacapato, Pocitos and Tolar Grande, with the latter being closest to the concession area, 35 km away. Expectation of job creation from the mine has been identified as a priority for the local communities, however, the Company's approach has been to encourage services and business' not aimed solely at mining but also at tourism, as this has historically been the principal economic activity of these communities and with which there is commonality with mining in the types of key services required; catering, lodging, transport, medical services, clothing and mechanical services.

## **SENTINEL**

Physical resettlement of 597 households and 1 631 subsistence farmers is nearing completion at Trident in accordance with requirements set out in the Resettlement Action Plan (RAP) approved by ZEMA. All project affected people received their agreed to and legally supported compensation and the process of compensation extended into the project commencement period on time prior to commencement of the mine's development. Substantial structured stakeholder engagement meetings were held during the resettlement planning, implementation and ongoing during as part of follow-ups. Due to the COVID-19 pandemic, physical engagement meetings have been affected and mostly done through electronic platforms, but done in small groups for specific topics, as prescribed by the Public Health Regulations, a situation well understood by our stakeholders. Acquisition of secured farmland for resettled households stands at 58.6%, with 247 households still not able to access the allocated land. Traditional governance structures are still reluctant to support the conversion of traditional land to land with full title for the resettled households. We remain committed to finding a mutually agreeable solution for all parties. Livelihood restoration, activities include training in entrepreneurship by adopting business idea stimulation, support initiatives and sustenance activities. Sustainable agriculture as a business venture for both crops and livestock has also been adopted as a sustainable livelihood restoration initiative and being implemented starting with mind-set transformation activities. To enhance sustainable agriculture as a livelihood for resettled households, Conservation Farming Unit (CFU) has been subcontracted to work with individual households to stimulate the concept of farming for nutrition and for income, with the aim of identifying small scale agribusiness opportunities. Other community activities include education support, health support, wildlife management support and community infrastructure. The strategic approach comprises ongoing avoidance of dependence drivers with a focus on Corporate Social Investment (CSI) activities in order for interventions to outlive the mine life. Key pending resettlement obligations are construction of bathrooms and landfill cells that were suspended due to lack of sustainability but these activities shall be implemented within 2022 using an adjusted implementation model.

597
Households resettled

1631 Subsistence farmers

## **KANSANSHI**

North Western Fence Extension: the Company intends to compensate and resettle all residents within the North Western Fence Extension area. The approximate 520 hectare area is within the modelled airshed of the Kansanshi Smelter. Kansanshi have recently been granted permission from the Royal Establishment and local Government to proceed in the community and disclose the project. This has initiated the Moratorium Resettlement Working Group formation. An asset survey is planned to commence in 2022.

Sydney's Corner: all families currently residing on a nine hectare piece of land known as Sydney's Corner are currently being resettled. These communities have occupied this land illegally. Kansanshi has been working closely with the Solwezi council in this resettlement. A full asset survey was completed in 2021 and families have started moving off the land.

## **BWANA MKUBWA**

Nine families down-gradient of the Bwana Mkubwa Mine are in the process of being resettled. All affected families have agreed to the resettlement terms which include a combination of negotiated settlements or full asset replacement packages. The Resettlement Action Plan is planned to be implemented in 2022. Bwana Mkubwa was sold to Shamrock Mining Limited on October 11, 2020, who have assumed the environmental liabilities.

9 Households resettled







## **INDIGENOUS PEOPLES**

The host communities at our Cobre Panama and Ravensthorpe operating sites include indigenous peoples.

## **COBRE PANAMA - CASE STUDY**

In Panama, as First Quantum looked to develop the Cobre Panama project, our in-country teams engaged with the communities and affected people following the completion of the ESIA, building a relationship and understanding between all parties. This included with the Ngabe-Bugle indigenous people with whom FPIC was sought and received. The Ngabe-Bugle people self-defined the FPIC process which was completed and documented in 2017 and was subject to independent audited. All have houses which are self-designed, and all children have access to education, skills developments opportunities as well as healthcare, all of which they didn't have before. An indigenous peoples development plan was also developed, that was also audited.

The process was conducted in accordance with ILO Convention 169 and IFC Performance Standard 7, as required prior to major industrial development.

Five years post completion of the plan and the families have successfully adapted to their new communities with their own farms.

## PRESERVING THE NATIONAL **HERITAGE OF PANAMA**

As part of the ESIA commitments, the Company is committed to an archeological monitoring and rescue program for Panama's cultural heritage.

Cobre Panama works hand in hand with the National Directorates of Historical Heritage and Museums, for the conservation and exhibition of the findings. Cobre Panama sponsors a new virtual experience at the Museum of Penonome highlighting 10 years of work safeguarding the national heritage of Panama.

Explore the interactive museum online at cobrepanama.com/museo

## **OUR PERFORMANCE** At the beginning of 2017, First Quantum completed a decade-long process to resettle several hundred people living near the Cobre Panama Project. Among those voluntarily relocating were two small indigenous communities, who moved from villages settled a few years earlier to new homes in the rainforest 5 km away. This resettlement was among the first to be carried out under the

Resettlement Action Plan an Indigenous Peoples Development Plan was developed and implemented. Three years into the plan, programs and support continue in partnership with government education, health and social development agencies. Engagement is ongoing.

With respect to cultural heritage at Ravensthorpe, there have not been any cultural heritage issues. Ravensthorpe has of the Aboriginal groups who have Native Title over the lands on which we operate, namely the Wagyl Kaip and Southern Noongar people of Albany and the Southern Nyungar people of Esperance, and has a strong history corridor Levy.

of compliance to the Heritage Protocols contained within those agreements.

Most recently in November 2019, a "Site Identification Aboriginal Heritage Survey of the Shoemaker Expansion Area and Straight Infrastructure Corridor" was conducted. This survey included representation from both the Wagyl Kaip and Southern Noongar people, the Southern Nyungar people of Esperance, an anthropologist, an archaeologist and legally-binding agreements in place with each Ravensthorpe. As a result of the survey both Aboriginal groups had no objections to Ravensthorpe progressing with their plans for the eastern portion of the Shoemaker-Levy expansion area and the straight infrastructure



Where indigenous communities are present, we use our best efforts to respect their standing as distinct, self-determining peoples with collective rights.

Guiding Principles on Business and Human Rights adopted by the United Nations in 2011. A highly collaborative effort, the Cobre Panama resettlement has earned appreciation from indigenous leaders, international experts and the government of Panama and is seen as a model for successfully resettling communities through FPIC. As part of the

## **ASSET CLOSURE**

## **OUR APPROACH**

At First Quantum we don't see site closure as a onesize-fits-all exercise. Each operating site is unique in terms of its geographical, social and ecological setting and our approach to closure reflects this local context. Our approach to site closure is therefore no different to our approach to site development, where specific risks are identified and appropriate controls are implemented. Closure related risk identification occurs long before site closure starts. There are a number of benefits to taking a long term approach. Firstly, a longer term plan using more reliable data is more likely to be successful, and secondly, many closure related liabilities can be addressed in the operational life of the site, significantly reducing the effort required after closure.

A critical part of the closure process is the engagement with our local stakeholders. Our two most important stakeholders at our operations approaching closure are our employees and the communities who will remain in the area after the site has closed. The Company supports a transition to re-employment in different fields. Employees at sites approaching closure have been provided with opportunities to learn new skills or further their academic studies, allowing them to find work elsewhere. Where possible, a future land use offering local communities with new opportunities and livelihoods would always be a primary objective of ours. However, if the future land use does not offer opportunities, leaving a site which is physically, chemically and biologically stable is a non-negotiable requirement. In order to meet these requirements, the Company uses internal resources and globally recognised leaders in closure planning to help us plan. Closure Plans which present the most likely routes to a stable closure are regularly updated at all of our sites.

In addition to actively planning for the closure of all of our current mining operations, First Quantum manages a number of closed sites in Canada. The Company has taken a similar approach to our operations in which all aspects of the process receive the appropriate resources to manage the risks identified and to move the site towards its objectives and future use. Our closed properties use a comprehensive approach that incorporates

safety, environment, community, and cost factors to identify risks and establish site specific targets. As part of this process, the safety of our closed tailings storage facilities and dams are regularly reviewed by independent experts. Given that all of our closed sites are located in Canada we have adopted the Mining Association of Canada (MAC), Towards Sustainable Mining (TSM) protocols. During the external MAC verification of our closed sites in 2021, it was concluded that we met or exceeded a level (A) requirement for 96 of the criteria, resulting in a total conformance of an average of 83.5%.

December 31, 2021
185
164
126
81
69
43
34
17
7
5
\$731

\$ million	December 31, 2021
Ravensthorpe	185
Cobre Panama	164
Kansanshi	126
Sentinel	81
Cobre Las Cruces	69
Closed properties	43
Pyhäsalmi	34
Guelb Moghrein	17
Çayeli	7
Enterprise	5
Total AROs	\$731

Site	2021	2022	2023	2024	2025	2026	2027+
Operating sites	Operating – closu	re planning					
Guelb Moghrein	Operating – closu	re planning				Closure	
Çayeli	Operating – closu	re planning				Closure	
Pyhasalmi	Operating – closu	re planning		Closure			
Winston	Closure activities						
Sturgeon	Closure activities						
Samatosum	Closure activities						
Norbec	Closure activities						
Millenbach	Closure activities						
CRC White Plne	Closure activities						
Lac Shortt	Closure activities						
Delbridge	Re	elease					
White Pine Mine	Sc	old					

## **2021 TOTAL LAND DISTURBANCE AND MINING CONCESSION AREAS**

Operating Site	Çayeli	Cobre Las Cruces	Cobre Panama	Guelb Moghrein	Kansanshi	Pyhäsalmi	Ravens- thorpe	Sentinel	Total
Total area under license (Ha) end 2021	9 074	3 200	12 955	8 100	9 434	412	3 389	95 000	141 564
Total Disturbance end 2021	17	1 056	3 080	1 416	5 941	219	2 594	6 826	21 149
Total Area rehabilitated up to then end of 2021 (Ha)	2	316	1 482*	22	101	47	15	134	2 119

\*Data does not include all reforestation undertaken as part of the reforestation plan. Total area reforested to December 31, 2021 was 3 520 hectares.





## **METHODOLOGY**

First Quantum is committed to transparency and ongoing development of its Environmental, Social and Governance (ESG) reporting in line with the expectations of key stakeholders. The following section outlines the methodology undertaken to compile the ESG report.

### **ENERGY CONSUMPTION**

- Historically energy was reported by converting fuel to power. This method did not reflect the efficiencies in the energy generation and made a comparison between bought power and self-generated power difficult. Since 2021 energy consumption data is presented in terms of electrical power consumption.
- The UK Government GHG Conversion Factors for Company Reporting conversion factors were used for all fuel to energy conversions.
- Where specific power generation efficiency factors were not known for on-site power generation, a 40% efficiency factor was applied to allow for generation losses to determine real energy consumption.
- Energy associated with the electrical power sold by Cobre Panama is excluded.
- Scope 2 Energy consumption is measured in megawatt hour (MWH) as it is consumed on site and converted to GJ in accordance with the abovementioned conversion factors.

### **PURCHASED ELECTRICITY**

 During the compilation of this ESG report the Electricity generation by source values were obtained from 2020 International Energy Association's (IEA) World Energy Statistic, as the 2021 was not yet published. Where data was not available, it was assumed that electricity generation have a 50:50 split between coal and gas.

## **WATER**

- Historically water withdrawal, discharge and re-use is measured in accordance with the Water Accounting Framework (WAF) for the Minerals Industry of Australia (Minerals Council of Australia, 2014). However for 2021 First Quantum has chosen to align our water usage reporting to the ICMM's Water Reporting Good Practice Guide, 2nd Edition.
- All definitions and categories have therefore been aligned with the requirements and specifications of the Water Reporting Good Practice Guide. The volumes provided were collected by our staff and represent the best effort of our teams.

### **GREENHOUSE GAS EMISSIONS**

- All our carbon emissions are calculated in accordance with the Greenhouse Gas Protocol;
   A Corporate Accounting and Reporting Standard (WRI, WBCSD, 2001).
- Scope 1: For the conversion of Fuels to GHG, we have used the 2021 United Kingdom Government Greenhouse Conversion Factors.
- Scope 2: The 2021 International Energy Association's (IEA) World Energy Statistics coefficients were used to calculate emissions from National Energy Grid. Emissions from previous years are restated as based on updated emission factors.
- · Scope 2: All Scope 2 data is location based.

- The data provided was collected by our staff and represents the best effort of our teams.
- Our Scope 3 emissions represents all known downstream activities outside of our financial and operational control to produce London Metal Exchange (LME) A Grade Copper Cathode. Copper Cathode produced on site has no further
- Scope 3 emissions. Downstream logistical, smelting and refining activities associated with the production of LME A Grade Copper Cathode from copper concentrate, blister copper and copper anode are considered. While every effort has been made to improve the accuracy of our Scope 3 Downstream emissions, they remain estimates based on activities outside our financial and operational control.
- Scope 3 emissions provided do not include emissions from upstream activities or our supply chain
- Scope 3 emission include Greenhouse Gas emissions related to the transportation of by-product

### **ENERGY INTENSITY**

- For the conversion of fuels to energy, we have used the United Kingdom Government Greenhouse Conversion Factors for our Company Reporting.
- Country electricity generation source values were obtained from the International Energy Association's (IEA) Emission Factors for 2021.
- It was assumed that electricity generation of all other activities (exploration and projects) have a 50:50 split between coal and gas.

### **EMISSIONS INTENSITY**

- Scope 1 and Scope 2: Only emissions from our operating sites and not our closed properties, projects, exploration activities and supporting offices were included. Emissions associated with smelting Sentinel concentrate at Kansanshi are included as Kansanshi emissions. Emissions associated with the power sold by Cobre Panama are excluded.
- Scope 3: Our Scope 3 emissions represents all known downstream activities outside of our financial and operational control to produce London Metal

- Exchange (LME) A Grade Copper Cathode. Copper Cathode produced on site has no further Scope 3 emissions. Downstream logistical, smelting and refining activities associated with the production of LME A Grade Copper Cathode from copper concentrate, blister copper and copper anode are considered. While every effort has been made to improve the accuracy of our Scope 3 Downstream emissions, they remain estimates based on activities outside our financial and operational control. Scope 3 emissions provided do not include emissions from upstream activities or our supply chain.
- Scope 3 Freight: All emissions associated with the transportation of copper concentrate, blister copper and copper anode by road, rail and sea were included under freight. This excludes the transportation of copper concentrate from Sentinel to Kansanshi. Port handling activities were not considered. The 2021 United Kingdom Government Greenhouse Conversion Factors for Company Reporting were used to calculate freight emissions. Distances were estimated based on known final destinations.
- Scope 3 Smelting: This includes all emissions
   associated with smelting of copper concentrate, blister
   copper and copper anode at facilities where we don't
   have financial and operational control. Emissions
   associated with smelting of copper concentrate at
   Kansanshi were included in Scope 1 and 2 above.
   Power and fuel consumption associated with smelting
   processes were calculated from a number of widely
   accessible industry references.
- Scope 3 Refining: This includes all emissions associated with refining of copper anode to final LME A Grade Copper Cathode at facilities where we don't have financial and operational control. Power consumption was estimated based on a number of widely accessible industry references. Emissions were calculated by using IEA country factors in countries where the refining occurred.
- Cu-eq: All non copper by-product commodities were scaled by the number of equivalent units of copper they represent in value. Relative commodity prices were averaged over the reporting period. Data for Ravensthorpe is not included on a copper equivalent basis as nickel is the primary product.



# SUSTAINABILITY REPORTING

In addition to this ESG Report, First Quantum's sustainable reporting suite includes the following reports and sustainability policies which are available on our website.

www.first-quantum.com













# TAX TRANSPARENCY AND CONTRIBUTIONS TO GOVERNMENT REPORT

Report complied in line with Canada's Extractive Sector Transparency Measures Act ("ESTMA") reporting obligations as well as Chapter 10 of the EU Accounting Directive. The report highlights First Quantum's contributions to host Governments.

This content index supplements First Quantum's 2021 sustainability reporting suite, which includes the Annual Report, Environmental, Social and Governance Report, Tax Transparency and Contributions to Governments Report (Tax Report).

Listed in the content index are GRI's General Disclosures, Management Approach Disclosures and topic-specific disclosures for the relevant material topics reported. Where relevant references are also provided for the stipulated SASB Metals and Mining disclosures. In addition, references are made to specific SDG's where disclosures are presented in line with covered in the "Business reporting on SDG's: An Analysis of the Goals and Targets.

GRI has an established set of reporting principles which determines if a sustainability reporting has been prepared in accordance with the GRI Standards. These principles define the report content

(stakeholder inclusiveness, sustainability context, materiality and completeness) and the report quality (accuracy, balance, clarity, comparability, reliability and timeliness). The Company's sustainability information has been prepared and is presented in accordance with the GRI Standards "Core" application level, additional disclosures a have been included where the relevant data is presented within the ESG report. The GRI reporting principles have been implemented as follows:

GRI Reporting Principles	Comment
Stakeholder Inclusiveness	In 2020, First Quantum commissioned an independent review of the materiality of our environmental, social and safety disclosures. The review included an analysis of our existing disclosures, a priority ratings review and a disclosure gap analysis (ESG Report, page 10). We welcome feedback on our reporting and continue to engage with stakeholders in an open and transparent manner.
Sustainability Context	An overview of our Sustainability Strategy is provide on Page 6 of the ESG Report
Materiality	We have provided data for issues that our stakeholders and our company consider to be material. These issues are identified through regular engagement with internal and external stakeholders. Reporting on these issues helps to inform our strategy, governance structures, risk management, operational management and reporting metrics. First Quantum' Mtaeriliaty process is described on Page 10.
Completeness	We believe that the ESG Report covers matters material to our Company.
Accuracy	Information is presented both as qualitative responses and quantitative measurements. Measurements and responses are subject to internal review at various levels to ensure consistency and accuracy. Data is published once a thorough review process has been completed. Methodologies for reporting are updated when relevant, based on international frameworks (for example, emissions factors) or best practices for the metals and mining industry.
Balance	Through our reporting we strive to increase our transparency and as such we report on topics that are material to our stakeholders.
	Our report is developed with our stakeholder requirements and expectations in mind. We have presented information using a combination of high quality graphics and coloured text to ensure information is easy to read, interpret and understand. We are committed to the ongoing transparency and development of our sustainability reporting.
Clarity	Our report is developed with our stakeholder requirements and expectations in mind. We have presented information using a combination of high quality graphics and coloured text to ensure information is easy to read, interpret and understand. We are committed to the ongoing transparency and development of our sustainability reporting.
Comparability	We disclose information for the current year as well as historical data. When relevant, historic data has been restated i.e. changes in methodology, updated emission factors or changes in industry reporting best practices. This is made clear in our sustainability reporting.
Reliability	The report is subject to extensive internal review by the site and corporate level teams compiling the data as well as by senior management. The approach and methodologies are documented and follow industry practice. Assumptions and calculations are widely discussed prior to publishing to ensure reliability.
Timelines	January 2021 to December 2021



GRI 102: General Disclosures						
Disclosure Number	Disclosure Title	Reference	SASB Reference	SDG		
102-1	Name of the organization	First Quantum Minerals Ltd.				
102-2	Activities, brands, products and services	ESG report: Page 5	EM-MM-000.A			
102-3	Location of headquarters	AIF: Page 6 Annual Report: Page 165				
102-4	Location of operations	ESG report: Page 5				
102-5	Ownership and legal form	ESG report: Page 5				
102-6	Markets served	AIF: Pages 5 to 12				
102-7	Scale of the organization	ESG report: Page 5	EM-MM-000.B			
102-8	Information on employees and other workers	ESG report: Page 31		Goal 8. Decent Work and Economic Growth Goal 10. Reduced inequalities		
102-9	Supply chain	ESG Report: Page 13				
102-10	Significant changes to the organization and its supply chain	Annual Report: Pages 4 to 7 AIF: Pages 122 to 126				
102-11	Precautionary Principle or approach	ESG report: Page 9				
102-12	External initiatives	ESG Report: Pages 9, 24, 25, 28, 29, 34 and 43				
102-13	Membership of associations	ESG Report: Pages 45				
102-14	Statement from senior decision-maker	Annual Report: Page 4 ESG Report: Page 2				
102-16	Values, principles, standards, and norms of behaviour	ESSDR: Pages 6, 12 and 13 Code of Conduct				
102-17	Mechanisms for advice and concerns about ethics	Code of conduct Whislteblower Policy Insider Trading Policy				
102-18	Governance structure	ESG Report: Page 12				
102-20	Executive-level responsibility for economic, environmental, and social topics	ESG Report: Page 12				
102-26	Role of highest governance body in setting purpose, values, and strategy	ESG Report: Page 12				
102-29	Identifying and managing economic, environmental, and social impacts	ESG Report: Page 29				
102-31	Review of economic, environmental, and social topics	ESG Report: Page 12				
102-32	Highest governance body's role in sustainability reporting	ESG Report: Page 12				
102-40	List of stakeholder groups	ESG Report: Page 10				
102-30	Effectiveness of risk management processes	ESG Report: Page 29				
102-41	Collective bargaining agreements	ESG Report: Page 32	EM-MM-310a.1			
102-42	Identifying and selecting stakeholders	ESG Report: Page 10				
102-43	Approach to stakeholder engagement	ESG Report: Page 10				

GRI 102: Gener	al Disclosures					
Disclosure Number	Disclosure Title	Reference	SASB Reference	SDG		
102-44	Key topics and concerns raised	ESG Report: Page 10				
102-45	Entities included in the consolidated financial statements	Annual Report: Page 119				
102-46	Defining report content and topic Boundaries	ESG Report: Pages 10 and 11				
102-47	List of material topics	ESG Report: Page 10				
102-48	Restatements of information	ESG Report: Pages 9 and Page 55 to 57				
102-49	Changes in reporting	ESG Report: Pages 9 to 11 and 55 to 57				
102-50	Reporting period	ESG Report: Page 9				
102-51	Date of most recent report	May 2022				
102-52	Reporting cycle	Annual				
102-53	Contact point for questions regarding the report	info@fqml.com				
102-54	Claims of reporting in accordance with the GRI Standards	ESG Report: Page 48				
102-55	GRI content index	Following Table				
102-56	External assurance	First Quantum does not currently externally as information disclosed in our ESSDR. All data is and reviewed internally. In 2019, the methodol for the quantification of GHG gases was evaluate a third party consultancy. The verified method currently used.	s collected logy used ated by			

GRI 200: Economic						
Disclosure Number	Disclosure Title	Reference	SASB Reference	SDG		
203	Management approach disclosures – Indirect Economic Impacts	ESG Report: Pages 34 to 36				
203-1	Infrastructure investments and services supported	ESG Report: Pages 36 to 41 and 43		Goal 5. Gender Equality Goal 9. Industry, Innovation and Infrastructure Goal 11. Sustainable cities and communities		
203-2	Significant indirect economic impacts	ESG Report: Pages 36 to 41		Goal 1: No Poverty Goal 3. Good health and Wellbeing Goal 8. Decent Work and Economic Growth		
204	Management approach disclosures – Proportion of spending on local suppliers	ESG Report: Page 13	EM-MM-510a.1			
204-1	Proportion of spending on local suppliers	ESG Report: Page 13		Goal 8. Decent Work and Economic Growth		

GRI 300: Enviro	onmental			
Disclosure Number	Disclosure Title	Reference	SASB Reference	SDG
302	Management approach disclosures – Energy	ESG Report: Pages 7, 15 and 16 Climate Change Report: Page 4 Energy Environmental Policy Climate Change Position Statement		
302-1	Energy consumption within the organization	ESG Report: Pages 15 and 16	EM-MM-130a.1	Goal 7 Affordable and Clean Energy Goal 8. Decent Work and Economic Growth Goal 12. Responsible Consumption And Productio Goal 13. Climate Action
302-3	Energy intensity	ESG Report: Page 18		Goal 7 Affordable and Clean Energy Goal 8. Decent Work and Economic Growth Goal 12. Responsible Consumption And Productio Goal 13. Climate Action
303	Management approach disclosures – Water	ESG Report: Pages 20 and 21 Social Responsibility Strategy		
303-1	Interactions with water as a shared resource	ESG Report: Page 20		
303-3	Water withdrawal	ESG Report: Page 20	EM-MM-140a.1	Goal 6. Clean Water and Sanitation
303-4	Water discharge	ESG Report: Page 20	EM-MM-140a.1	
303-5	Water consumption	ESG Report: Pages 20 to 21 and 56 to 57	EM-MM-140a.1	Goal 6. Clean Water and Sanitation Goal 8. Decent Work and Economic Growth Goal 12. Responsible Consumption and Productior
304	Management approach disclosures – Biodiversity	ESG Report: Page 24 and 25 Biodiversity Environmental Policy	EM-MM-160a.1	Goal 17. Partnerships for The Goals
304-2	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	ESG Report: Page 24 and 25		
304-3	Habitats protected or restored	ESG Report: Page 24 and 25		Goal 6. Clean Water and Sanitation Goal 15. Life On Land
305	Management approach disclosures – Emissions	ESG Report: Pages 6, 7, 14, 17 and 18 Climate Change Report: Page 4 Environmental Policy Climate Change Position Statement		
305-1	Direct (Scope 1) GHG emissions	ESG Report: Page 17	EM-MM-110a.1	Goal 3. Good health and Wellbeing Goal 12. Responsible Consumption And Production Goal 13. Climate Action Goal 14. Life Below Water

GRI 300: Environmental						
Disclosure Number	Disclosure Title	Reference	SASB Reference	SDG		
305-2	Energy indirect (Scope 2) GHG emissions	ESG Report: Page 17		Goal 3. Good health and Wellbeing Goal 12. Responsible Consumption And Production Goal 13. Climate Action Goal 14. Life Below Water		
305-3	Other indirect (Scope 3) GHG emissions	ESG Report: Page 17		Goal 3. Good health and Wellbeing Goal 12. Responsible Consumption And Production Goal 13. Climate Action Goal 14. Life Below Water Goal 15. Life On Land		
305-4	GHG emissions intensity	ESG Report: Page 18		Goal 13. Climate Action Goal 14. Life Below Water Goal 15. Life On Land		
305-5	Reduction of GHG emissions	ESG Report: Page 14 Climate Change Report	EM-MM-110a.2	Goal 14. Life Below Water		
305-7	Other significant air emissions	ESG Report: Page 19	EM-MM-120a.1	Goal 12. Responsible Consumption And Production Goal 13. Climate Action Goal 15. Life On Land		
306	Management approach disclosures – Effluents and waste	ESG Report: Pages 22, 29 and 30 Environmental Policy Social Responsibility Strategy	EM-MM-540a.2 EM-MM-540a.3			
306-3	Waste generated	ESG Report: Page 22	EM-MM-150a.4 EM-MM-150a.5 EM-MM-150a.6. EM-MM-150a.7 EM-MM-150a.8	Goal 3. Good health and Wellbeing Goal 6. Clean Water and Sanitation Goal 12. Responsible Consumption and Production		
306-4	Waste diverted from disposal	ESG Report: Page 22		Goal 3. Good health and Wellbeing		
306-5	Waste directed to disposal	ESG Report: Page 22		Goal 3. Good health and Wellbeing		

GRI 400: Socia				
Disclosure Number	Disclosure Title	Reference	SASB Reference	SDG
403	Management approach disclosures – Occupational health and safety	ESG Report: Pages 26 to 28 Occupational Health and Safety Policy, Social Responsibility Strategy, Human Rights Policy		
403-1	Occupational health and safety management system	ESG Report: Pages 26 and 27		
403-2	Hazard identification, risk assessment, and incident investigation	ESG Report: Pages 26 and 27		Goal 3. Good health and Wellbeing
403-3	Occupational health services	ESG Report: Pages 27 and 28		Goal 3. Good health and Wellbeing
403-4	Worker participation, consultation, and communication on occupational health and safety	ESG Report: Pages 27 and 28		
403-5	Worker training on occupational health and safety	ESG Report: Pages 27 and 28		
403-9	Work-related injuries	ESG Report: Page 26	EM-MM-320a.1	
404	Management approach disclosures – Training and Education	ESG Report: Page 32		
404-2	Programs for upgrading employee skills and transition assistance programs	ESG Report: Page 32		Goal 4. Quality Education Goal 8. Decent Work and Economic Growth Goal 8. Decent Work and Economic Growth
405	Management approach disclosures – Diversity and Equal Opportunity	Board and Senior Executive Diversity Policy ESG Report: Pages 12 and 31		
405-1	Diversity of governance bodies and employees	ESG Report: Pages 12 and 31		Goal 5. Gender Equality Goal 8. Decent Work and Economic Growth
408	Management approach disclosures – Child Labour	ESG Report: Pages 13, 34, 35, 42 and 44 Code of Conduct, Human Rights	EM-MM-210a.3 EM-MM-210b.1	
408-1	Operations and suppliers at significant risk for incidents of child labor	ESG Report Pages 13, 34, 35, 42 and 44	EM-MM-210a.3 EM-MM-210b.1	Goal 8. Decent Work and Economic Growth Goal 16. Peace, Justice and Strong Institutions
409	Management approach disclosures: Forced or Compulsory Labor	ESG Report: Pages 13, 34, 35, 42 and 44 Code of Conduct, Human Rights, Social Responsibility Strategy	EM-MM-210a.3 EM-MM-210b.1	
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	ESG Report Pages 13, 34, 35, 42 and 44	EM-MM-210a.3 EM-MM-210b.1	Goal 8. Decent Work and Economic Growth
410	Management approach disclosures – Security Practices	ESG Report: Page 42 Social Responsibility Strategy, Human Rights Policy	EM-MM-210a.3 EM-MM-210b.1	
410-1	Security personnel trained in human rights policies or procedures	ESG Report Page 42	EM-MM-210a.3 EM-MM-210b.1	
411	Management approach disclosures – Rights of Indigenous Peoples	ESG Report: Pages 34, 35, 42, 43 and 44 Social Responsibility Strategy, Human Rights Policy	EM-MM-210a.3 EM-MM-210b.1	
411-1	Incidents of violations involving rights of indigenous peoples	ESG Report: Page 36		Goal 2. Zero Hunger
413	Management approach disclosures – Local Communities	ESG Report: Pages 34 to 36 Social Responsibility Strategy, Human Rights Policy	EM-MM-210b.1	Goal 16. Peace, Justice and Strong Institutions
413-1	Operations with local community engagement, impact assessments, and development programs	ESG Report: Pages 28 and 35 to 41		

This document provides an overview of key Environmental, Social & Governance key performance indicators for First Quantum Minerals Limited. The data relates to each given calendar year.

In addition to the data presented for the 2021 calendar year, some historic data has been restated. The Company will restate data when more accurate figures are available, such as the publication of updated coefficients used in the calculation of emissions figures or updated methodologies to improve accuracy.

KPI	Required Units	2019	2020	2021	Footnotes
Environmental policy (Y/N)	Policy	Υ	Υ	Υ	
Climate Change	Climate change data inc	cludes CO <sub>2</sub> equiva	alents from all Fir	st Quantum pro	jects, operating sites, closed properties and supporting offices
Scope 1 Emissions	metric kilotonnes of CO <sub>2</sub> equivalents	3 268	3 760	3 901	
Scope 2 Emissions	metric kilotonnes of $CO_2$ equivalents	496	492	539	Scope 2 emission have been restated using the 2021 IEA emission factors
Energy consumption	ТЈ	20 295	23 073	25 659	
Energy consumption from renewable sources	ТЈ	8 755	8 408	8 377	
Energy consumption from non-renewable sources	ТЈ	11 540	14 665	17 282	
Non renewable energy (electricity and heating & cooling) sold	TJ	2 104	1 503	233	
Biodiversity					
Sites assessed for biodiversity importance	Number	5	5	5	
Sites with biodiversity management plans	Number	5	5	5	
Sites used for production, extraction or plantation activities	Number	8	8	8	
Total land disturbed	Hectares	15 567	20 595	21 149	This figure refers to total cumulative disturbance
Air/Emissions					
Nitrogen oxides (NO <sub>x</sub> ) Emissions	metric tonnes	2 196	2 694	2 827	This figure is inclusive of NO <sub>2</sub> emissions
Sulphur Dioxide (SO <sub>2</sub> ) emissions	metric tonnes	6 931	8 242	6 672	
Particulate Matter (PM) Emissions	metric tonnes	415	315	217	
Waste					
Total waste generated	metric tonnes	335 226 699	323 850 680	372 236 170	
Mining waste generated	metric tonnes	335 080 589	323 705 431	372 116 031	Includes tailings solids, waste rock, overburden, slag, waste treatment solids and beneficiation rejects
Hazardous waste generated	metric tonnes	9 210	7 406	14 359	
Non-hazardous waste generated	metric tonnes	136 901	137 843	105 780	
Non-hazardous waste recycled	percent	15%	7%	14%	
Hazardous waste recycled	percent	52%	36%	46%	
Hazardous and non-hazardous waste incinerated	percent	1%	2%	7%	
Hazardous and non-hazardous waste landfilled	percent	81%	78%	75%	



KPI	Units	2019	2020	2021	Footnotes			
Water	All water data represe	All water data represents our operating sites only						
Total operational water withdrawal	megalitre	247 853	238 070	263 162	Seawater used for cooling at the Cobre Panama power has been excluded for the data presented as this type of water use is not directed used for mining operations			
Water withdrawal: sea water	megalitre	412	5 760	5 832				
Çayeli	megalitre	287	244	256				
Ravensthorpe	megalitre	125	5 516	5 576				
Cobre Panama	megalitre	446 748	468 517	438 064	Seawater withdrawal associated with cooling water for the Cobre Panama Power Station has been excluded from totals relating to direct mining and processing activities.			
Water withdrawal: fresh surface water	megalitre	200 706	189 056	203 715				
Çayeli	megalitre	584	97	90				
Cobre las Cruces	megalitre	353	614	436				
Cobre Panama	megalitre	120 883	111 960	133 820				
Guelb Moghrein	megalitre	-	_	64	Improvements in data collection have resulted in this information being included for 2021.			
Kansanshi	megalitre	14 156	16 668	12 855				
Pyhäsalmi	megalitre	4 249	3 720	3 471				
Ravensthorpe	megalitre	500	500	500				
Sentinel	megalitre	59 980	55 497	52 479				
Water withdrawal: groundwater	megalitre	45 576	41 514	51 907				
Çayeli	megalitre	3 166	3 875	4 350				
Cobre las Cruces	megalitre	567	813	897				
Cobre Panama	megalitre	965	1 361	4 253				
Guelb Moghrein	megalitre	2 327	2 486	2 546				
Kansanshi	megalitre	31 525	26 407	33 921				
Pyhäsalmi	megalitre	589	650	637				
Ravensthorpe	megalitre	55	511	256				
Sentinel	megalitre	6 382	5 411	5 047				
Water withdrawal: municipal water and other indu	ustrial users megalitre	1 160	1 741	1 709				
Cobre las Cruces	megalitre	1 127	1 716	1 687				
Pyhäsalmi	megalitre	33	25	22				

KPI	Units	2019	2020	2021	Footnotes
Total operational water Discharge	megalitre	259 392	249 778	262 296	Seawater used for cooling at the Cobre Panama power has been excluded for the data presented as this type of water use is not directed used for mining operations
Water discharge: sea water	megalitre	4 568	4 723	4 616	
Çayeli	megalitre	3 901	3 897	3 833	
Cobre las Cruces	megalitre	667	827	782	
Cobre Panama	megalitre	446 194	467 789	437 383	Seawater discharge associated with cooling water for the Cobre Panam Power Station has been excluded from totals relating to direct mining and processing activities.
Water discharge: fresh surface water	megalitre	157 593	134 217	132 770	
Cobre Panama	megalitre	112 161	91 217	103 155	
Kansanshi	megalitre	6 615	10 816	-	
Pyhäsalmi	megalitre	4 667	3 890	3 343	
Sentinel	megalitre	34 150	28 295	26 272	
Water discharge: groundwater	megalitre	24 110	30 718	15 204	
Cobre las Cruces	megalitre	157	286	517	
Cobre Panama	megalitre	506	2 727	-	
Guelb Moghrein	megalitre	500	373	130	
Kansanshi	megalitre	13 919	16 789	13 919	
Ravensthorpe	megalitre	50	805	-	
Sentinel	megalitre	8 978	9 738	639	
Water discharge: municipal water and other industrial users	megalitre	25	34	41	
Pyhäsalmi	megalitre	25	34	41	
Operational Water Consumption	megalitre	73 097	80 085	109 665	
Çayeli	megalitre	10	8	10	
Cobre las Cruces	megalitre	883	1 628	1 237	
Cobre Panama	megalitre	19 298	22 911	37 347	
Guelb Moghrein	megalitre	1954	2 113	2 455	
Kansanshi	megalitre	24 053	23 079	27 438	
Pyhäsalmi	megalitre	340	345	768	
Ravensthorpe	megalitre	3 000	4 849	6 372	
Sentinel	megalitre	23 559	25 153	34 038	
Percentage reused	megalitre	66%	67%	73%	
Percentage of water sourced from regions with High or Extremely High Baseline Water Stress	megalitre	0.1%	0.8%	0.5%	Source: WRI Aqueduct, accessed on January 2022 at www.aqueduct.wri.org

KPI	Units	2019	2020	2021	Footnotes
Labour Management					
Employee turnover rate	percent	5%	24%	8%	The voluntary turnover in 2020 was 2.9%, while the involuntary turnover was 20.9%. A significant reduction in the Cobre Panama workforce was required during 2020 due to Cobre Panama operations being placed on preservation and safe maintenance for much of the second quarter, as a result of a temporary suspension of labour activities order by the Panamanian Ministry of Health in response to the COVID-19 pandemic. Cobre Panama ramped back up to full production levels in August 2020.
Female share of total workforce (%)	percent	10%	10%	11%	
Occupational Health & Safety					
Total fatalities	number	0	0	1	
Employee fatalities	number	0	0	0	
Contractor fatalities	number	0	0	1	
Near miss frequency rate (NMFR)	per 200 000 hours worked	231	158	158	
NMFR – Employees	per 200 000 hours worked	281	192	320	
NMFR - Contractors	per 200 000 hours worked	152	92	40	
Total recordable injury frequency rate (TRIFR)	per 200 000 hours worked	0.31	0.32	0.33	
TRIFR - Employees	per 200 000 hours worked	0.35	0.38	0.36	
TRIFR - Contractors	per 200 000 hours worked	0.26	0.21	0.27	
Total recordable injury frequency rate (LTIFR)	per 200 000 hours worked	0.05	0.06	0.07	
LTIFR – Employees	per 200 000 hours worked	0.05	0.07	0.07	
LTIFR - Contractors	per 200 000 hours worked	0.05	0.03	0.06	
Total recordable severity rate rate (SEV FR)	per 200 000 hours worked	1.00	1.00	3.20	
SEV FR - Employees	per 200 000 hours worked	1.50	1.10	2.10	
SEV FR - Contractors	per 200 000 hours worked	0.30	0.80	5.30	
Governance					
Board Tenure	years	11	12	8	
Women on the Board	percent	25%	22%	30%	
Code of conduct (Y/N)	Y/N	Υ	Υ	Υ	
Code of conduct – completion of online training	percent	88%	94%	98%	
Grievance mechanisms and procedures (Y/N)	Y/N	Υ	Υ	Y	



# CAUTIONARY STATEMENT ON FORWARD-LOOKING INFORMATION

Certain statements and information herein, including all statements that are not historical facts, contain forward-looking statements and forward-looking information within the meaning of applicable securities laws.

The forward-looking statements include estimates, forecasts and statements as to the Company's future production levels; plans, targets and commitments regarding climate change-related physical and transition risks and opportunities and other environmental risks and opportunities (including intended actions to address such risks and opportunities); local biodiversity; greenhouse gas emissions and emissions reductions targets; energy efficiency and carbon intensity; the use of renewable and sustainable energy sources; the design, development and operation of the Company's projects and future reporting regarding climate change and environmental matters; the Company's expectations regarding increased demand for copper and nickel and the causes thereof; the Company's project pipeline and development and related growth plans; the ongoing development of the Company's social infrastructure; the use of innovation projects across major operations; resettlement plans for Company projects; and the maintenance of the Company's local procurement programs. Often, but not always, forward-looking statements or

information can be identified by the use of words such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate" "believes", "targets" or "intends" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved.

With respect to forward-looking statements and information contained herein, the Company has made numerous assumptions including among other things, assumptions about continuing production at all operating facilities, the price of copper, gold, nickel, silver, iron, cobalt, pyrite, zinc and sulphuric acid, anticipated costs and expenditures, the success of Company's actions and plans to reduce greenhouse gas emissions and carbon intensity of its operations and the ability to achieve the Company's goals. Forward-looking statements and information by their nature are based on assumptions and involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements, or

industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements or information. These factors include, but are not limited to, future production volumes and costs, the temporary or permanent closure of uneconomic operations, costs for inputs such as oil, power and sulphur, political stability in Panama, Zambia, Peru, Mauritania, Finland, Spain, Turkey, Argentina and Australia, adverse weather conditions in Panama, Zambia, Finland, Spain, Turkey, Mauritania, and Australia, labour disruptions, potential social and environmental challenges (including the impact of climate change), power supply, mechanical failures, water supply, procurement and delivery of parts and supplies to the operations, the production of off-spec material and events generally impacting global economic, political and social stability.

See the Company's Annual Information Form for additional information on risks, uncertainties and other factors relating to the forward-looking statements and information. Although the Company has attempted to identify factors that would

cause actual actions, events or results to differ materially from those disclosed in the forward-looking statements or information, there may be other factors that cause actual results, performances, achievements or events not as anticipated. estimated or intended. Also, many of these factors are beyond First Quantum's control. Accordingly, readers should not place undue reliance on forward-looking statements or information. The Company undertakes no obligation to reissue or update forwardlooking statements or information as a result of new information or events after the date hereof except as may be required by law. All forward-looking statements made and information contained herein are qualified by this cautionary statement.

