FIRST QUANTUM MINERALS LTD.

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) ALIGNED

CLIMATE CHANGE REPORT

May 2024

Contents

Cover image: Reforestation efforts at Cobre Panamá

Message from the CEO

At First Quantum we are proud of our contribution to society; providing the metals that build the modern world, deploying the technical capabilities of our people to add value, and participating in the countries we operate to improve lives. We are committed to responsible mining. Understanding that long term relationships with local communities are key, we prioritise the development of sustainable and reciprocal benefits such as employment and training, business development, and supporting local education. Acknowledging our environmental footprint, we strive to minimise harm and maximise positive outcomes through robust safety, environmental, and social management practices, while continually striving for improvement.

Tristan Pascall – Chief Executive Officer

The emergence of climate change and achieving a just transition to a green economy alongside the need for continuing upliftment of society present formidable challenges for the world. Rightly, balancing global mineral demand with responsible social engagement and environmental stewardship is paramount in developing new mining projects. This is especially relevant to our company as we embrace our role as a responsible copper producer.

Our own climate change commitments centre on a progressive transition to lower carbon energy sources across the Company's operations. This included Cobre Panamá mine which is a world class asset, vital in the global supply of the copper that will be essential for the energy transition. Cobre Panamá is currently in a state of preservation and safe management following instruction from the Government of Panama. As a result, our power plant is not currently in operation, but could provide more affordable power for Panama as the country experiences record power prices given the current climatic challenges with renewable power sources. Longer term we remain committed to moving away from reliance on coal fired power in the country.

I was pleased with the announcement in November 2023, of a significant step forward in delivering on our climate change commitments: First Quantum has secured a ten-year power supply agreement with ZESCO, the Zambian state-owned utility, ensuring 100% renewable power for our Trident and Kansanshi operations in Zambia.

This landmark agreement not only reaffirms our unwavering commitment to sustainability but also aligns with Zambia's green vision.

Zambia recently declared a state of national emergency due to drought conditions in the south and centre of the country that have brought about challenges in food security and electricity production.

We will continue to support ZESCO and Zambia throughout this challenging period. We continue to pursue the development of further renewable energy options in Zambia, such as the 430MW wind and solar project that we are working on in partnership with Total Eren. This reflects our dedication to responsible and just environmental stewardship as well as underlining our commitment to the country.

I'm pleased to report continued progress on our climate change commitments, disclosing the Scope 3 GHG emissions across our value chain for the first time. This represents an important step in our sustainability efforts, showing our commitment to understanding our entire footprint and underscoring our dedication to transparency and the continuous development of our sustainability disclosures.

We are committed to ensuring that this transition occurs in a just manner, reflecting our values of fairness and equity as we work towards delivering lower carbon copper that will enable a greener future for all.

Climate change strategy

Introduction

At First Quantum Minerals Ltd. (FQM), we are committed to extracting resources responsibly, whilst expanding our portfolio and delivering production growth with a lower carbon intensity. We are well placed to deliver the energy metals needed to drive the global low-carbon transition and socio-economic development. This commitment not only aligns with our business goals but also emphasises the importance of a just transition, ensuring that the benefits of our sustainable practices contribute to the well-being of communities and foster inclusive socio-economic growth.

As one of the world's leading producers of copper and nickel, we are aware of the imperative to decrease the carbon footprint of our operations in accordance with global initiatives for energy decarbonisation. In 2021, we established ambitious short and medium term greenhouse gas emissions reduction targets that were built upon concrete project strategies, which are consistent with a 1.5°C trajectory. We have been diligently progressing towards the realisation of these projects.

These efforts encompass various significant initiatives listed below:

Given that copper plays a pivotal role in driving the global shift towards a low-carbon economy and is a key driver for the socio-economic advancement of developing nations, the positive impact of our mining operations is instrumental in achieving the objectives outlined in the United Nations Sustainable Development Goals (UN SDGs). The metals extracted through our mining operations play a fundamental role in this transition. Without increased production of copper and nickel, meeting the growing demand for renewable power and electric vehicles essential for global decarbonisation will be unattainable. Consequently, the necessity for new projects will become increasingly apparent to fulfill these crucial needs.

Securing 100% renewable power for Trident and Kansanshi in Zambia and transitioning to 20% renewable energy sources at Cobre Panamá, when fully operational.

Advancing feasibility studies for a substantial 430MW wind and solar project in Zambia, with our company serving as the offtaker.

Forging a technology partnership with Hitachi to develop battery-powered dump trucks at the Kansanshi mine.

Leveraging in-house expertise to deliver sustainability benefits through innovation (trolley assist, in-pit crusher and conveying and waste oil recycling (saving scope 3)

Scope 3 GHG emissions estimated and disclosed for the first time for 2022 and 2023. We will continue to expand our emissions reporting and disclosure.

Our climate change commitments

Ensure **resilience to climate change** through the identification and management of climate-related risks through effective mitigating measures. The Company plans to invest appropriately to **improve the climate resilience of our operations**.

Consider ongoing partnerships with suppliers and customers on emissions and how to reduce the carbon footprint.

Commitment to **ongoing development and transparency of climate change reporting** and progress in achievement of targets.

Improve efficiency, energy intensity and reduce wastage and emissions by leveraging our innovative culture and new technologies as they become commercial.

Engagement with stakeholders on climate actions and progress.

Prioritise use of renewable energy sources for new and existing operations where they are achievable.

Continue to develop an **understanding of lifecycle emissions of the value chain**.

Internal carbon pricing is integrated into the evaluation of new projects.

Set tangible targets through the execution of real projects.

Pillars of our climate change strategy

- **Securing a Just Transition that supports the sustainable future of both our communities and operations**
- **Strive for renewable power at both of our new and existing projects when possible**
- **Produce essential, low-carbon copper and nickel for electricity networks, renewables, and electric vehicles**

Our climate emission targets

BY 2022

~100,000

tonnes of carbon dioxide equivalent (CO_2e) saved per year by powering Cobre Panamá's expansion when fully operational with renewable energy

BY 2023

100%

renewable power secured for Trident and Kansanshi in Zambia

In November 2023, the Company and ZESCO agreed on a ten-year renewable power deal, mainly hydroelectric, guaranteeing 100% renewable energy

BY 2025

-30%

Reduction of our absolute greenhouse gas (GHG) emissions*

BY 2030

-50%

Reduction of our absolute GHG emissions*

-50%

reduction target in the GHG intensity of the copper mined at our operations

The Company has committed to reducing absolute Scope 1 and 2 greenhouse gas emissions by 30% by 2025 and 50% by 2030. These targets have been set on both an absolute CO_2 equivalent (CO_2e) for both years and the CO_2e intensity of our copper production for 2030. Achieving the targets would put the Company on a path consistent with a 1.5°C reduction trajectory indicated by the International Energy Agency's Net-Zero scenario.

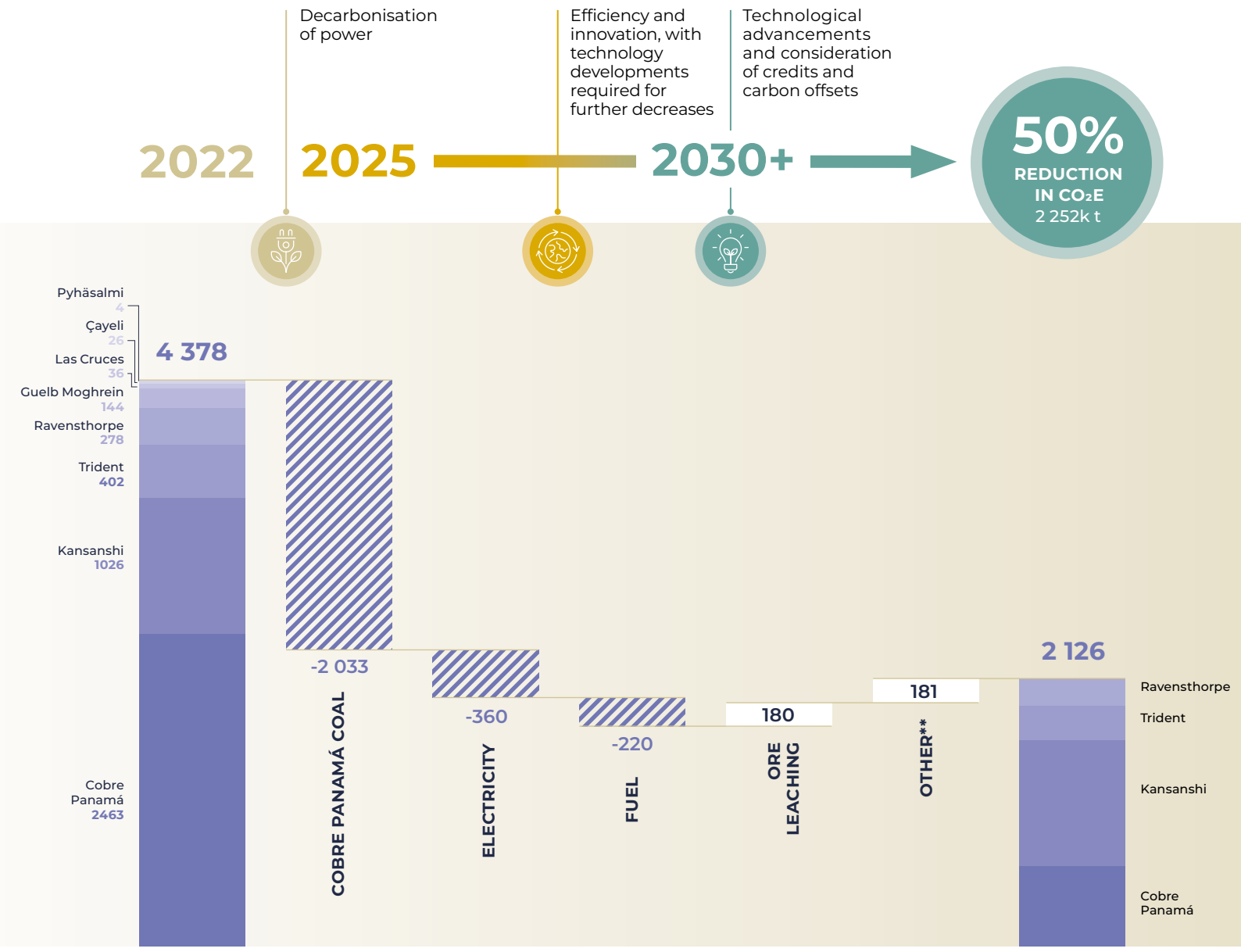
The achievement of the Company's GHG emissions reduction targets requires decarbonisation of power, specifically at the Zambian and Panamanian operations. The Company's single largest source of GHG emissions is the two unit coal-fired power station in Panama, representing close to half of annual Scope 1 and 2 emissions.

The decarbonisation strategy in Panama, comprises three steps. The first step was achieved in September 2022, with the renewable power purchase agreement (PPA) for the additional 64MW required to power the 100 Mtpa (CP100) expansion, receiving regulatory approval from the National Dispatch Centre (CND). This long-term, fixed-price PPA with AES Panama "AES", an independent power producer, will be supplied with 100% renewable energy from a portfolio that includes a combination of solar, wind, and hydroelectric generation. The second and third steps to reducing emissions at Cobre Panamá would be expected to involve a progressive substitution of energy previously generated by the two 150MW coal-fired units with renewable power so that the equivalent of only one of the two units would be required to supply Cobre Panamá's needs from 2025 onwards.

By 2030, it is expected that Cobre Panamá would entirely transition away from coal power, dependent on the seasonality and availability of renewable energy. It is expected that this power will be sourced through further power purchase agreements. The Company completed a study into the feasibility of alternative sources of power in 2023. It should be noted that Cobre Panamá is in a phase of preservation and safe management, with no production, and the power station not currently operational.

In November 2023, the Company and ZESCO, the Zambian state utility, announced a ten-year power supply agreement for renewable power, predominantly hydroelectricity, for the Company's Trident and Kansanshi operations. This will mark the achievement of 100% renewable power for the Company's Zambian operations. Under the agreement, ZESCO committed to certifying the power as generated through a renewable source.

2030 target and our roadmap to achievement



* The Company's GHG emissions reduction targets are based on Scope 1 and 2, with 2020 as the base year.
** Other includes limestone, explosives and refrigerants.

2030 target and our roadmap to achievement

Decarbonisation of power

2025 to 2030

Panama

CP100 power at Cobre Panamá sourced through a 64MW renewable PPA

Transition unit 1 (2025): up to 35% renewable power, up to 14% LNG

Transition unit 2 (2030): complete transition away from coal power, up to 50% renewable power, up to 50% LNG

Engaging with specialist consultants and Government of Panama on a Just Transition away from coal power in Panama

ZAMBIA

100% renewable power sourced in Zambia through certification

Progressing on feasiblities studies on 430MW wind and solar project in Zambia, in partnership with Total Energies.

AUSTRALIA

Reducing reliance on power from diesel back-up generators through wind farm projects at Ravensthorpe.

Energy efficiency and technology

Expansion of initiatives such as trolley assist, in-pit crushing and conveying, fuel optimisation through rolling resistance programmes, blast optimisation to reduce energy use

Evaluation and implementation of new technologies, such as railveying at Cobre Panamá and ore sorting

Reduce waste and increase recyling

Reuse water through incremental and continuous improvement projects

Work with Original Equipment Manufacturers (OEMs) to leverage new technologies as they become commercial viable

Looking ahead, our approach to new projects and ore leaching at Kansanshi

2030+

Carbon pricing for evaluation of new projects

Identify feasible sources of renewable power

Ore leaching: Leached ore emissions at Kansanshi primarily stem from oxide ore treatment, posing challenging emissions. Addressing these requires technological advancements and may involve carbon offsets or alternative solutions. The mine anticipates a decreasing proportion of oxide ore processed over its lifespan

The vital role of copper

Copper's global role and First Quantum's climate opportunities

Mining is integral to meeting the challenges of climate change and in decarbonising global energy infrastructure. As the world's 6th largest copper producer, and a significant nickel producer, our metals will enable the global transition to a low carbon economy.

First Quantum is a pioneer in adopting technologies like trolley-assist, which substantially reduces diesel use. Expanding the use of such innovations enhances energy efficiency, mitigates climate transition risks, and positions First Quantum to capitalise on emerging technologies.

LEADING THE WAY IN MINING INNOVATION WITH TROLLEY ASSIST TECHNOLOGY

TARGET FOR

UP TO 50%
TROLLEY ASSIST USAGE

~10km
OF TROLLEY LINES INSTALLED AT COBRE PANAMÁ, SENTINEL & KANSANSHI

MORE THAN 110
TROLLEY-ENABLED MINING TRUCKS

UP TO 90%
OF DIESEL SAVINGS ON HAUL ROAD UP RAMPS

MORE THAN 118 000
tCO_2 SAVED IN 2023 THROUGH MINING EFFICIENCIES
Trolley, electric shovel, in-pit crushing and grade control drilling

First Quantum can enhance its renewable energy use globally, yielding environmental, operational, and economic advantages.

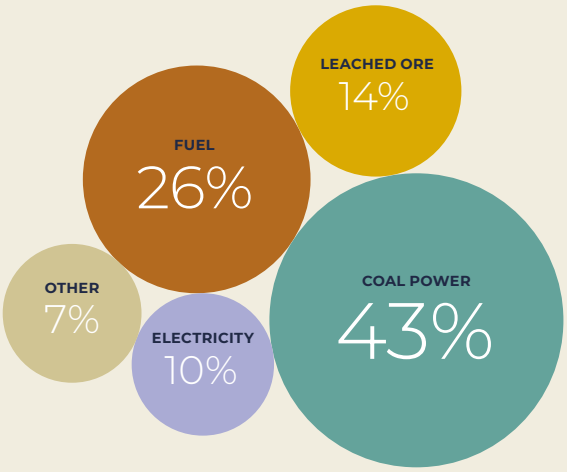
Our growth plan aims to achieve an annual production of 1 million tonnes of copper equivalent.

Our efforts to lower GHG levels in copper and nickel, along with our sustainable mining practices, will position our product favourably for future opportunities in this sector, in the form of premiums for low GHG-intensity metals.

Examples of community empowering initiatives on climate change on page 13.

Performance and outlook 2023 vs 2022

Year-on-year change to our GHG emissions



4 067 000 tonnes CO_2e
2023 SCOPE 1 & 2 GHG EMISSIONS

3 276 000 tonnes CO_2e
2022 SCOPE 3

2 963 000 tonnes CO_2e
2023 SCOPE 3

9% decrease in Scope 1 emissions

The decrease in Scope 1 emissions is primarily driven by Cobre Panamá being placed on P&SM in November 2023, with the coal-fired power station also undergoing the same process. Additionally, the expansion of trolley assist has contributed favourably to the reduction in Scope 1 emissions by reducing diesel consumption across our three biggest sites (10 million litres of diesel saved).

17% increase in Scope 2 emissions

Scope 2 emissions have increased primarily due to a higher IEA country emission factor for Zambia in the year (+43%) and slightly higher electricity purchases. However, the signing of the new Power Supply Agreement (PSA) in November guarantees 100% renewable power for Kansanshi and Trident starting from 2024, paving the way for decreases in these emissions in the future.

10% decrease in Scope 3 emissions

Our Scope 3 emissions for our material categories amount to 3 276 000 tCO_2e in 2022 and 2 963 000 in 2023. The reduction is due to the lower production and sales volumes at Cobre Panamá and our Zambian operations. For a comprehensive breakdown, refer to page 25.

900 000 tonnes
OF CO_2e SAVED ANNUALLY THROUGH THE OPERATION OF THE KANSANSHI SMELTER

MORE THAN
118 000 tonnes
OF CO_2e SAVED ANNUALLY THROUGH ZAMBIAN PIT ELECTRIFICATION

OVER
92%
OF THE GROUP'S PURCHASED ELECTRICITY CONSUMPTION IS FROM RENEWABLES

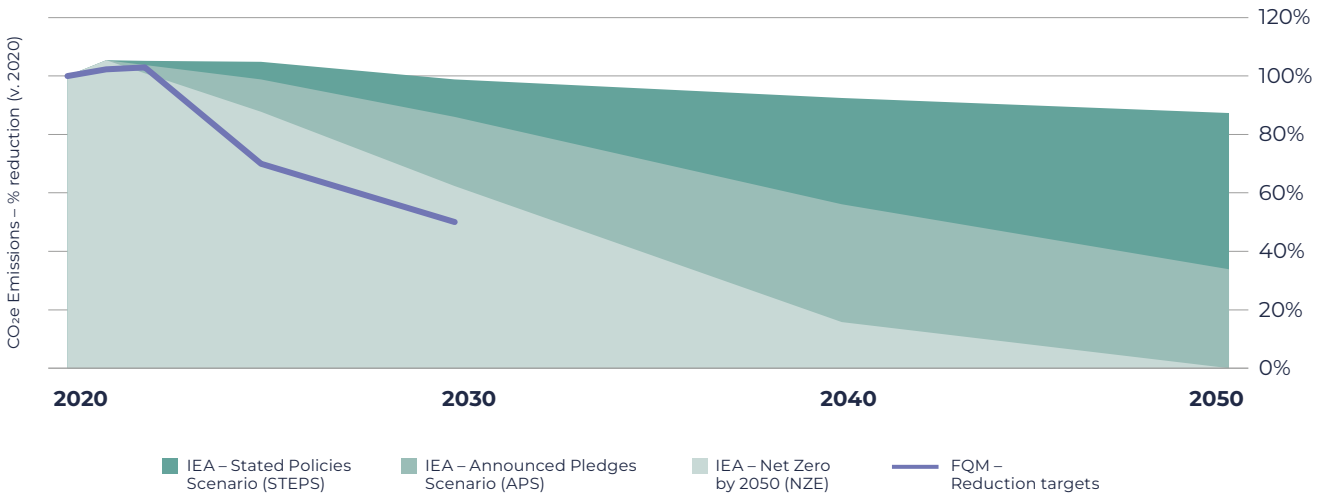
7%
DECREASE IN SCOPE 1 AND 2 GHG EMISSIONS

4%
DECREASE IN ENERGY CONSUMPTION

9%
DECREASE IN COPPER PRODUCTION

22%
INCREASE IN NICKEL PRODUCTION

FIRST QUANTUM TARGET PATHWAY COMPARED WITH CO_2e EMISSIONS REDUCTION PATHWAYS, IEA WEO 2022 CO_2e EMISSIONS
BASED ON DATA FROM INTERNATIONAL ENERGY AGENCY (IEA), (2022), AS MODIFIED BY FIRST QUANTUM



Approach to Net Zero

We maintain a supportive stance towards the concept of achieving a net-zero target for greenhouse gas (GHG) emissions. However, our commitment to this target depends on the progress of technological advancements aimed at reducing our reliance on fossil fuels.

At present, our GHG emissions reduction targets are based on solutions that are commercially available. This forms the foundation of our current sustainability efforts. Consequently, we have not made a firm commitment to a net-zero goal at this time. Instead, we remain open to continually monitoring and evaluating the development of new technologies that can be practically implemented within our operations once they become commercially viable. When such opportunities arise, we are prepared to adjust and update our GHG emissions reduction targets to reflect our commitment to environmental responsibility and sustainability. This approach demonstrates our company's willingness to adapt and evolve in response to emerging technologies and changing environmental needs.

Operating costs

Our company is fully committed to the expansion of renewable energy utilisation throughout our operations, driven by our GHG emissions reduction objectives. Ensuring the reliability and cost-effectiveness of power in the current market remains a top priority as we transition to cleaner energy solutions. Importantly, the projected operating costs associated with renewable energy, necessary to achieve our GHG emissions reduction targets, are expected to lower our operational expenses when compared to current power costs.

At Cobre Panamá, the new purchase power agreement (PPA) for 64MW of renewable power commencing in 2024 is lower than the current market price for coal. We anticipate that renewable power PPAs will offer significant advantages over the current market price of coal. Furthermore, our unwavering dedication to minimizing haulage costs is set to bolster overall operational efficiency, contributing to greater cost efficiency.

Capital expenditure

No significant capital expenditure is expected to be required to decarbonise the power used by our operations, and with limited capital required prior to 2025.

Included within the Company's $4.9 billion, 3-year project capital expenditure guidance, are a number of initiatives expected to deliver climate change benefits.

These projects target improved energy efficiency, enhanced water usage and reduced absolute and/or intensity of greenhouse gas emissions.

- **Upgrade of the Kansanshi smelter** to increase processing capacity, which reduces downstream greenhouse gas emissions from the transport and refining of copper concentrate produced by Kansanshi and Sentinel.
- A **wind farm at Ravensthorpe** to reduce reliance on power from diesel back-up generators, subject to final approval.
- **Expansion of trolley assist** infrastructure across the Company's three largest mines to lower diesel consumption and associated mine fleet greenhouse gas emissions.
- Relocation and installation of **in-pit crushers** to optimise haul cycle efficiency and reduce mine fleet diesel consumption.

Due to Cobre Panamá being on preservation and safe maintenance, specific capex guidance for the site has been removed. However, initiatives such as the following were previously incorporated:

- **Water initiatives** at various sites for the management of water quality and reuse by operations.
- **Railveyor** at Cobre Panamá to move mined material to crushers lowering diesel consumption.
- **Solar panels** on warehouse roofs at Cobre Panamá, generating over 3MW of renewable power to power admin and camp facilities.
- Investing in **power efficiency software** across dump trucks at Cobre Panamá, reducing diesel consumption.

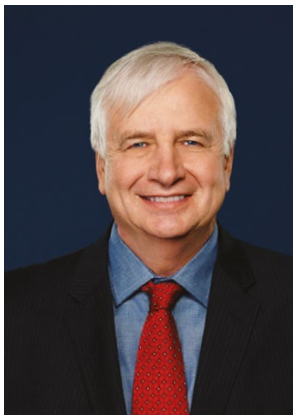
Governance

Kevin McArthur

CHAIR

Kathleen Hogenson

Joanne Warner



Simon Scott

The Board executes many of its responsibilities through its Committees.

The **Environment, Health, Safety and Corporate Social Responsibility (EHS&CSR) Committee**, comprising independent directors, is responsible for the review and monitoring of the suitability and effectiveness of the Company's risk management policies and processes with respect to climate change as defined in the Committee charter.

The EHS&CSR Committee also monitors 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.

Members of management responsible for climate change report to the EHS&CSR Committee at each meeting and are available to answer questions raised by EHS&CSR Committee members. This committee meets four times a year.

The **Human Resources Committee** is responsible for the review, identification and mitigation of risks associated with the Company's compensation policies as well as for making any necessary determinations relating to executive compensation.

The Human Resources Committee considers external relations as performance objectives in determining total compensation for executives. External relations encourages the development of responsible and effective business relationships with appropriate governments, agencies, regulators, financial institutions, and our shareholders through our investor relations programme and broader engagement initiatives (for example in respect of Environmental Social and Governance (ESG), inclusive of climate change issues).

These external relations factors are summarised below:

Environment

Longer-term business strategy with project identification and approval influenced by potential impacts on the environment and climate change.

Measures linked to sustainable and innovative mine operations that are intended to reduce environmental impact.

Social

Measures linked to the performance and engagement of our workforce.

Measures linked to the health and growth of our relationships with external stakeholders, including the communities in which we operate.

Governance

Measures linked to safe operating procedures, mitigating workplace injuries.

Ensuring business practices and decisions are conducted with appropriate judgement.

Ensuring compensation decisions are made within an effective governance framework.

The assessment and management of climate-related issues are actively monitored by the Company's management as part of regular operational and technical planning at each operation.

Considerations include regulatory, market and policy impacts and the integration of climate-related issues into strategic and financial planning. Business planning also incorporates climate-related issues in the targeting of innovation projects to deliver improvements to operational, environmental and social performance. GHG emissions are reviewed as part of the annual budgeting process and aligned to site operational planning. Carbon pricing is used in the evaluation of new projects to ensure resilience to transitional climate risk as well as incentivising the use of lower carbon alternatives.

Board of Directors

Audit Committee | EHS & CSR Committee | Human Resources Committee

Reviews the suitability and monitors effectiveness of policies, processes and reporting related to climate change

Executive Management

Chief Executive Officer | Chief Financial Officer | Chief Operating Officer

Management and direct oversight of the implementation of operational approach and strategy on climate change

Group Functions and Site Operations

Site Operational Management | Environmental, Corporate Social Responsibility and Community Relations | Safety | Human Resources | Risk and Internal Audit | Legal and Governance

Responsibility for performance and compliance is delegated to the relevant managers and teams across the business as well as the identification of climate-related risks and opportunities and the implementation of related policies and practices

Empowering communities for climate resilience

At First Quantum, our comprehensive sustainability strategy is woven into the fabric of our operational framework, guiding our engagement with local stakeholders. We recognise the potentially disruptive impacts of climate change on our host communities.

PHYSICAL RISK KEYS

- Temperature averages and extremes
- Water Stress and Drought
- Storms and wind
- Wildfires
- Flooding
- Landslides

ACUTE CHRONIC

In our company's history, we've consistently backed social initiatives that revolve around our pillars of social investment, namely livelihoods, infrastructure, health, and education. This includes projects for water accessibility, sustainable agriculture, and reforestation in our operational regions. Through these efforts, we invest in community well-being and resilience, fostering self-sufficiency. Our collaborative approach ensures these sustainability initiatives are developed hand-in-hand with the communities impacted by our operations, forging a shared commitment to social and environmental progress.

Mauritania

First Quantum ensures water access for Akjoujt's 15,000 residents through the Benichab pipeline. The initiatives involve expanding the water distribution network, transitioning pipeline power stations to solar, and collaborating with governments to reactivate and drill boreholes. As Guelb Moghrein approaches closure, the company aims to transfer all water infrastructure to the Government of Mauritania, equipping local officials with expertise for future maintenance.

In 2022, heavy rains triggered flooding in Mauritania. Guelb Moghrein, in cooperation with local authorities, took action to mitigate the impact in Akjoujt. They dug a 2,000-meter water diversion ditch, expanded existing measures, provided water pumps to remove floodwater, and erected sand barriers to safeguard the hospital and the community.

Spain

In 2022, the Guillena renewable energy program was successfully completed, supplying photovoltaic energy systems to 12 public schools and municipal buildings in the municipality.

In 2022, Las Cruces (CLC) donated over 200 trees to enhance Gerena's green spaces, with locals actively participating in creating more inviting public areas. These trees originated from CLC's nursery, where native species are grown for environmental restoration.

Panama

At Cobre Panamá, we combat deforestation by educating local farmers on sustainable, high-yield practices like agroforestry and efficient water management. This not only boosts crop yields but also reduces reliance on forest clearing for activities like cattle farming. The program ensures active community involvement, ongoing monitoring, and a mutually beneficial relationship between the mine and local farmers, promoting both economic growth and environmental preservation.

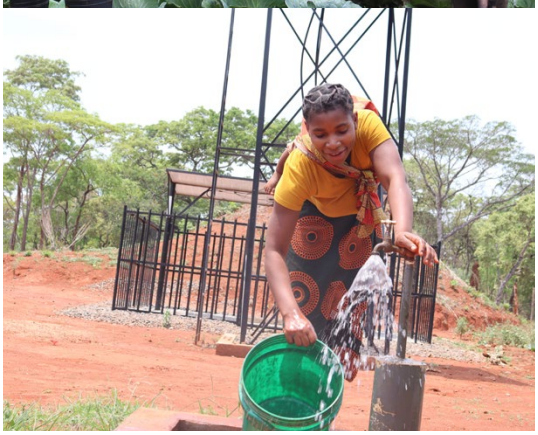
Cobre Panamá's commitment to sustainable water management is evident with strong rate of water reuse of 78%. We are located in an area with a highly positive water balance, receiving 4 - 5 metres of rain each year. This means that we consistently discharge water into the environment, a practice subject to stringent compliance, monitoring, and audits conducted by the environmental ministry. Notably, 98% of the water we utilise comes from this natural rainfall source, and the water use for our Cobre Panamá facility accounts for a mere 0.003% of the country's total water supply, located several catchment areas away from Panama City and the canal.

ZAMBIA

We combat heavy rains and flooding in our catchment through two key programs: Agricultural Support, providing subsidised inputs and promoting high-value crops, and Local Business Development, empowering businesses to reduce agricultural dependence and enhance livelihoods. We collaborate with the government for flood relief and aid in community infrastructure restoration.

Slash and burn for land clearance near our mines harmed soil, reduced crop yields, and worsened biodiversity loss and climate change. First Quantum tackles this with two campaigns: Conservation farming programme (4000 farmers trained in 2023) for sustainable yields and "Stop Burning: be healthier, wealthier and happier" campaign.

First Quantum invests in water infrastructure, benefiting Kisasa's 8,000+ residents with two boreholes near the Sentinel mine. In 2022, a water facility was donated to the Weighbridge clinic in Solwezi, serving over 18,000 people. In 2023, efforts to enhance community water access include support for 8 mini water schemes, 5 community bulk water schemes (175 water-points), and the installation of 75 community water hand pumps.



Physical resilience

First Quantum has consistently integrated the management of physical risks and climate hazards into its operational approach, encompassing all stages from planning to closure.

Below is a summary of prevalent physical risks which have historically occurred in the countries we operate and our experience in managing their impacts.

PHYSICAL RISK KEYS

- Temperature averages and extremes
- Water Stress and Drought
- Storms and wind
- Wildfires
- Flooding
- Landslides

ACUTE CHRONIC

FINLAND

At Pyhäsalmi, pumping capacity has been raised in response to rising heavy rainfall. The most crucial pumping station now accommodates surface waters, mine dewatering water, and the majority of seepage waters from the Tailings Storage Facility (TSF), which are collected and returned to the TSF for treatment.

TURKEY

Çayeli conducted a study on the relationship between rainfall, humidity, and mine control in their operational region. This research prompted the installation of inclinometers, early warning systems, and instant displacement laser monitoring to enhance landslide management.

SPAIN

To mitigate lightning-related power outages, electrical facilities are equipped with protective measures, regularly inspected by both internal personnel and external auditors. Additionally, for the Las Cruces underground project, a solar power initiative is under consideration to reduce energy expenses.

MAURITANIA

To address the challenges of flooding and storms in our rural Australian operations, we've identified and enhanced high-risk infrastructure on-site for greater resilience. We've also established alternate supply routes to minimise disruptions. Additionally, we're contemplating a wind farm project, pending final approval, to reduce diesel usage and its associated costs.

Panama

Cobre Panamá integrates climate data analysis into mine planning to guarantee adequate pumping and dewatering capacity for the region's high rainfall. Water management and dewatering strategies undergo routine assessments, with thorough evaluations conducted by industry experts in geotechnical and hydrogeology.

ZAMBIA

In response to the challenges posed by the annual rainy season in Zambia, the Company undertook several measures to enhance infrastructure resilience and power supply stability. This included the construction of an extra power line and the implementation of redundant pumping capacity in Kansanshi to manage surge waters and maintain continuous pit operations. To mitigate the extreme rainfall and flooding experienced in early 2023 as a result of exceptionally high rains, additional pumping capacity was installed at Trident. We have taken a scientific approach to the evaluation of these pumping needs to balance the capital costs of the installations versus the impacts to the business of ongoing volatility in rainfall.

AUSTRALIA

To address the challenges of flooding and storms in our rural Australian operations, we've identified and enhanced high-risk infrastructure on-site for greater resilience. We've also established alternate supply routes to minimise disruptions. Additionally, we're contemplating a wind farm project, pending final approval, to reduce diesel usage and its associated costs.

RISK MANAGEMENT

Our primary assessment of the impacts of climate change on our operations and the Company have been informed by scenario analysis based on IEA World Energy Outlook 2023 and climate data projections from the Intergovernmental Panel on Climate Change (IPCC), as recommended by TCFD. Climate risks are incorporated into the Company's bi-annual risk assessment process to aid in strategic planning.

Climate risk management process

First Quantum's operations and future developments span four continents and a diverse range of conditions. The potential impacts of climate change therefore vary across our business and are specific to the geographies in which we operate. Our assessment of the significance of potential climate change impacts in 2021 was undertaken with the support of specialist climate consultants and engagement with operational site teams.

For the compilation of this report a similar process was undertaken, expanding on the outcomes and analysis of the prior assessment. Risks were identified through the internal consultation of operational and group management teams. Identified risks were evaluated across three climate scenarios. The evaluation, update and monitoring of climate change risks are integrated into the Company's bi-annual risk assessment process. As part of this process, responsibilities for risk controls and management are assigned to operational and group management and are subject to internal audit review. The risk register and the accompanying mitigating controls are reviewed twice a year by the Company's Audit Committee.

Consultation of climate risks are undertaken with:

- MANAGEMENT OF OUR OPERATING ASSETS
- SENIOR GROUP AND OPERATIONAL MANAGEMENT
- EHS&CSR COMMITTEE
- EXECUTIVE MANAGEMENT

Areas considered in climate risk assessment:

- OPERATIONAL ACTIVITY
- AVAILABILITY OF APPROPRIATE TECHNOLOGY
- LEGAL AND REGULATORY
- SUPPLY CHAIN
- ACCESS TO CAPITAL
- REQUIREMENTS OF COMMODITY MARKETS

Scenario analysis

A core element in assessing the impacts of climate change on our business, is considering assumptions and limitations related to the transition to a low carbon economy and the inherent impact of this transition on climate change.

First Quantum uses this climate-related scenario analysis to enhance its understanding of possible physical and transition risks and opportunities that may arise and how these assumed impacts can influence our business over time. Expanding on the previous scenario analysis, climate risks and opportunities were evaluated across three different scenarios. Each scenario was developed by incorporating the IEA scenario assumptions coupled with complementary climate data projections from the Intergovernmental Panel on Climate Change (IPCC). The time horizons considered in the scenario analysis were 2025 (Short Term), 2030 (Medium Term) and 2040 (Long Term), as these are aligned with our published 2025 and 2030 GHG targets.

The scenarios used during the 2023 climate risk analysis are as follows:

OVERVIEW	IEA SCENARIO	IPCC DATASET
Current	**Stated Policies Scenario (STEPS)** Representative of current policy settings. This scenario excludes Nationally Determined Contributions (NDCs) and longer term net zero targets. Energy-related objectives which include existing policies and measures under development per a sector are included.	8.5 RCP
Moderate Transition	**Announced pledges scenario (APS)** Representing our comparative scenario, this is most closely aligned to a pathway consistent with the goals of the 2015 Paris agreement to limit global warming to 2C˚, preferably 1.5C˚, from pre-industrial temperatures.	4.5* RCP
Accelerated Transition	**Net Zero (NZE)** Pathway for the global energy sector to achieve net zero CO_2 emissions by 2050. Relies on emissions reductions from energy sector to achieve its goals.	2.6 RCP

** Most closely aligned scenario with the IPCC dataset.*

Physical risk analysis

The most significant physical climate risks to First Quantum are summarised in the following tables and reflect the risk after considering the controls that we have implemented to mitigate the underlying risk.

Our risk assessment framework is based on an assessment of the likelihood and impact within the following time-frames under each climate scenario assessed:

- Short-term time frame to 2025
- Medium-term time frame to 2030
- Long-term time frame to 2040

Physical and transition risks are rated on a 1 – 5 rating scale of potential impact and likelihood. 1 represents a low risk and 5 a high risk.

PHYSICAL RISK KEYS

- Temperature averages and extremes
- Water Stress and Drought
- Storms and wind
- Wildfires
- Flooding
- Landslides
- Coastal and Offshore

ACUTE CHRONIC

	DESCRIPTION	MITIGATING MANAGEMENT STRATEGY	RISK
Tailings storage facilities and dams	The potential risk of a tailings storage facility or dam failure can be influenced by rising precipitation or fluctuations in persistent rainfall and temperature patterns. Alterations in the frequency or intensity of extreme weather events may affect the functionality of these facilities, necessitating extra planning and infrastructure to address the resulting impacts.	• Consistent scenario modelling in the planning and operation of facilities using climate data and predictions. • Incorporating resilience and capacity considerations in design and management for extreme weather events. • Continues monitoring by both on-site and corporate teams. • Regular independent reviews and audits. • Monitoring and reviewing best practices to ensure continual optimal performance.	
Mining activities	Our mining activities are susceptible to climate risks, such as extended periods of heavy rainfall or sudden surge events. These occurrences have the potential to result in flooding within and around the mining site and processing infrastructure, consequently hindering normal operational levels. Furthermore, the variability in rainfall intensity and volume can contribute to elevated maintenance demands.	• The design, engineering, and construction of plant and machinery are tailored to adapt to evolving environmental conditions. • Site management monitors weather data and conducts response plans for extreme weather to integrate them into mine planning. • Ongoing implementation and review of mitigating actions, including ensuring capacity for handling surge weather events and establishing monitoring mechanisms and protocols to reduce the vulnerability of our workforce or infrastructure to extreme weather events, are conducted by site management. • Well-designed drainage systems and flood preparedness plans are in place to address this risk.	

	DESCRIPTION	MITIGATING MANAGEMENT STRATEGY	RISK
Power supply 	Zambia relies significantly on hydroelectricity, making the country vulnerable to fluctuations in rainfall levels that could impact its power supply. In other locations, power interruptions can occur due to storm events. For instance, in Panama, the power line linking the station to the mine traverses an inaccessible region with undulating topography, making it susceptible to the effects of extreme weather events.	• The powerline infrastructure was purposefully designed and built to suit its specific environmental context, undergoing routine assessments and maintenance by the company's teams. • Collaboration with local and national governments, especially in Zambia, is actively pursued by the company to address power supply considerations for our mines. • A collaborative effort with Total Energies is underway to develop alternative and renewable power sources in Zambia, demonstrating the company's commitment to sustainable energy solutions.	
Communities 	Host communities, especially in developing economies where livelihoods are heavily reliant on agriculture, could face greater negative effects from shifts in weather patterns, such as alterations in rainfall or temperature affecting local resources. As a significant contributor to both local and national economic development, our communities may have heightened expectations from us.	• The company nurtures robust connections with our host communities, engaging in regular formal and informal interactions to promptly communicate and address any concerns. • Various initiatives are implemented by the company to support the availability of crucial resources like water and facilitate access to education and training. These programs aim to reduce the probability of shortages or interruptions that could affect our host communities.	
Supply chain 	Severe weather events, such as storms, have the potential to cause disruptions or delays in the supply chain, particularly at ports and roads essential for the delivery of crucial inputs needed for mine production.	• The active management of essential supplies inventory is synchronised with a thorough examination of forecast weather data to ensure operational resilience in the face of potential disruptions to supply infrastructure. • The company collaborates with host governments to oversee the management of local infrastructure vital for both communities and mines, and actively participates in the maintenance and, when necessary, the upgrade of associated infrastructure.	

	DESCRIPTION	MITIGATING MANAGEMENT STRATEGY	RISK
Health and safety 	The primary consequences of climate risks also present a direct threat to staff. The severity and implications of health and safety hazards may be temporarily heightened by climate-related risks; for instance, elevated temperatures can contribute to heat exhaustion.	• Execution of health and safety protocols crafted to mitigate the effects of extreme weather events and enhance the resilience of the workforce and essential equipment. • In locations where climate hazards are more pronounced, on-site teams actively monitor working conditions. Educational programs are implemented to inform the workforce about well-being considerations, including the importance of hydration and taking fatigue breaks.	
Water management 	Surge events and fluctuating levels of rainfall can present operational hurdles in managing water at operations. Concurrently, water stress and drought events can diminish the accessibility of water used in processing.	• Water management undergoes constant monitoring, with capacity constraints taken into account during the design and planning stages. • Operations strive to minimise freshwater consumption by incorporating new technologies or consistently enhancing efficiencies, emphasizing the reuse of water.	
Infrastructure damage 	The heightened intensity and severity of storms, floods, or wildfires during acute weather events pose a risk by potentially compromising the structural integrity of buildings and causing damage to equipment. Equipment damage could lead to disruptions, presenting operational challenges. Simultaneously, the potential collapse of buildings or infrastructure poses a health and safety risk to employees.	• Our operations possess expertise in handling acute weather events; by vigilantly monitoring the climatic conditions in our operational areas, contingency plans are formulated to minimise disruptions to work. • On-site infrastructure undergoes regular reviews to assess the need for maintenance or to consider actions that enhance resilience. • Evacuation plans and early warning systems have been put in place to facilitate the prompt evacuation of staff and equipment in response to such events.	

Transition risk analysis

Similar to the physical risk analysis, transition risks are assessed across each of the scenarios. Whilst physical risk is assessed by operations, transition risk is assessed at a company wide level. The most significant transitional risks to First Quantum are summarised in the following table:

TRANSITION RISK KEYS

- Policy and Legal Risks
- Technology Risk
- Market Risk
- Reputation Risk

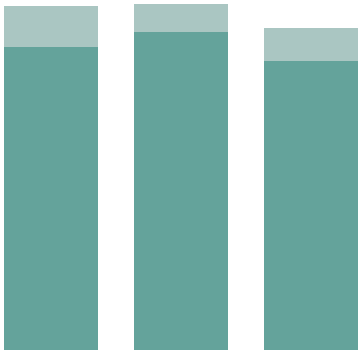
RISK	DESCRIPTION	MITIGATING MANAGEMENT STRATEGY
GHG emissions pricing and reporting requirements	As global commitments to decarbonisation increase, governments and regulatory bodies will impose stricter laws and regulations linked to GHG emissions. Carbon pricing as a control mechanism and reporting requirements will become more stringent as national commitments toward a lower carbon economy develop.	• The Company has regular engagement with local, regional and national government authorities and agencies to ensure that we have visibility and understanding of enacted changes to regulatory and policy frameworks. • Carbon pricing has been embedded in the evaluation of new projects to assess their resilience to potential new carbon taxes and to encourage the use of lower carbon technologies. • The Company has set interim and longer-term decarbonisation targets which are expected to significantly reduce the carbon footprint of metal production and exposure.
Shifts in energy policies	Shifts in energy policies could potentially impact the market price of electricity in the countries in which we operate. This may be particularly relevant for energy generated from non-renewable sources, whilst the increased demand for energy from renewable sources will impact supply.	• The Company monitors market prices for electricity and seeks long-term contracts for offtake, as well as opportunities for self-supply, where reasonable and competitive. • Operations at the Company's major sites are focused on mining and processing energy efficiency projects that have a significant positive impact on its emissions profile thereby reducing exposure.
Costs to transition to new technology	Reducing emissions related to mining fleets and the transition to renewable power sources are vital to the mining industry to decarbonise. This transition may require significant capital investment to implement, whilst additional costs could be required for training and maintenance.	• The Company has committed to reducing its reliance on high-carbon fuels for power generation, in the pathway to achievement of GHG emissions reduction targets, as outlined in this report. • The Company is leading the industry in the use of trolley-assist which significantly reduces fuel consumption, as well as a broader focus on the electrification of pit machinery, which remains key to the Company's short and medium-term decarbonisation strategy.

RISK	DESCRIPTION	MITIGATING MANAGEMENT STRATEGY
Risk of success of new technologies	Newer technology poses a risk of failure during or post-implementation. This can lead to downtime, leading to increased costs and reducing the expected efficiencies. Even with proven implementation and successful use, low-carbon technologies will require a well-established supply chain to meet the demand which can take several years to establish.	• The Company is engaged with the original equipment manufacturers (OEM) to monitor the availability and commercial viability of new mine fleet technology in line with the Company's renewal program. • Trolley assist also offers potential future bridging technology for the implementation of commercially viable battery solutions to diesel-operated mine fleets.
Changing customer behaviour	This shift in consumer preferences is a risk for carbon-intensive products. In the future, commodity market pricing mechanisms could assign a premium to products with lower embedded GHG emissions.	• The GHG intensity of copper produced from the Company's operations in Zambia are lower than or comparable to that of the average global copper production. Further initiatives to reduce energy consumption, maximise productivity and further decarbonise power are also expected to yield an improved GHG intensity of production. • Actions to reduce our GHG emissions in Panama, centred on the coal-fired power station, will significantly reduce the GHG intensity of the operation.
The increased cost of input materials	Second order impacts can arise from changes in the energy mix, for example, the reduction in petroleum production may affect prices for key inputs to the business such as fuel, sulphur and ammonium nitrate.	• Price monitoring and offtake agreements for key inputs are key areas of focus for the operations' commercial teams.

RISK	DESCRIPTION	MITIGATING MANAGEMENT STRATEGY
Sector stigmatisation/ pressure to decarbonise resulting in a reduction in capital availability	The continued use of coal for the power provided in Panama could hinder the ability of the Company to take advantage of strategic opportunities or limit access to capital markets, as stakeholder expectations for decarbonisation increase.	• The Company has reported key climate-related metrics for a number of years and is committed to the transparency and ongoing development of our climate change and broader ESG reporting. • There is continuous engagement with key stakeholders and ratings agencies on our approach and actions relating to climate change to ensure that our strategy is communicated and understood. • A clear action plan for decarbonising power in Panama is being implemented with the proportion of coal power to operations expected to reduce by around one fifth from 2024 as renewable power is sourced for the expansion of operations.
Just transition	A just transition involves addressing a wide array of risks and challenges related to shifting towards a more sustainable, low-carbon economy. This includes potential economic disruption, workforce re-skilling, social inequality, community resilience, energy security, political and regulatory uncertainties, financial risks, supply chain disruptions, environmental considerations, and managing public perception. It is a holistic approach to ensure a smooth and equitable transition while minimizing adverse impacts. The decarbonisation of Cobre Panamá's power stands at the forefront of our efforts to achieve our greenhouse gas reduction targets. This transformation places a premium on embracing sustainable energy sources. Central to this endeavour is our unwavering commitment to a just transition, with a core focus on minimizing any adverse social and economic effects.	• Collaborate with the Government of Panama and other stakeholders to develop and implement just transition plans that address the specific needs of affected regions, investing in climate-resilient infrastructure and fostering effective price stabilisation. • Partnerships with Total Energies in Zambia on a wind and solar project and installation of solar panels in Benichab, Mauritania to increase in-country renewable power provisions. • Collaborating with power providers across our operations to support development of new power sources through offtake contracts. • Continuously monitor the progress and impact of the transition, collecting data to assess the effectiveness of the mitigation strategies and making necessary adjustments as the process unfolds.

GHG and Energy metrics: 2021 to 2023

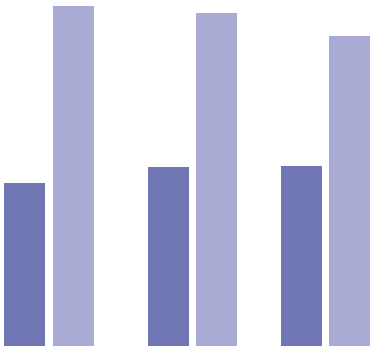
FIRST QUANTUM SCOPE 1 & 2 CO_2e EMISSIONS



Tonnes CO_2e	2021	2022	2023
Scope 1 Emissions	3 829 000	4 016 000	3 647 000
Scope 2 Emissions	518 000	360 000	420 000
Total scope 1 & 2 emissions	**4 347 000**	**4 376 000**	**4 067 000**
Scope 3 emissions*		**3 276 000**	**2 963 000**

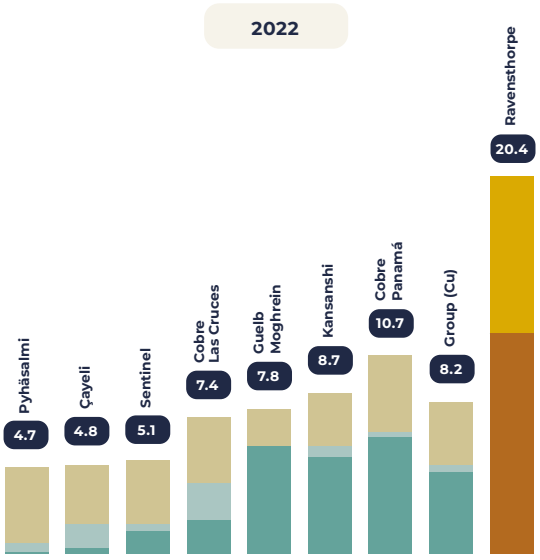
* Full scope 3 emissions first disclosed in 2022. Page 25 provides a breakdown of emissions by category and our approach to the calculation.

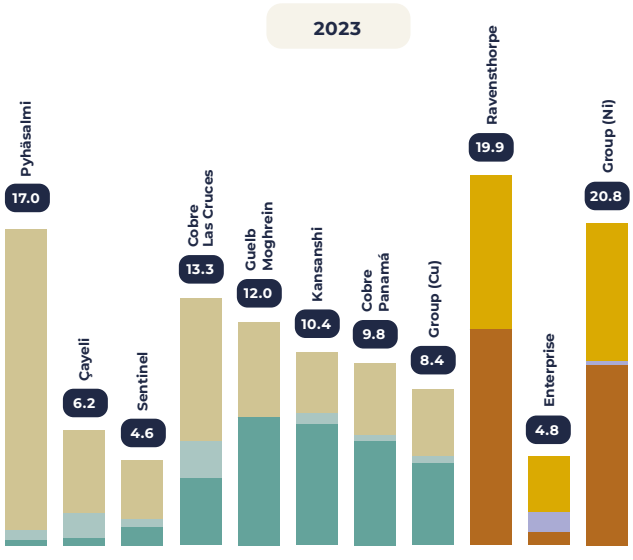
FIRST QUANTUM ENERGY CONSUMPTION



Terrajoules (TJ)	2021	2022	2023
Energy consumption	**25 659**	**26 135**	**24 999**
Energy consumption from renewable sources	8 377	9 180	9 204
Energy consumption from non-renewable sources	17 282	16 955	15 795

FIRST QUANTUM GHG INTENSITY





Tonnes CO_2e/ tonne Cu-EQ	SCOPE 1	SCOPE 2	SCOPE 1 & 2	SCOPE 3	SCOPE 1, 2 & 3
Pyhäsalmi	0.1	0.5	0.6	4.1	4.7
Çayeli	0.3	1.3	1.6	3.2	4.8
Sentinel	1.2	0.4	1.6	3.5	5.1
Cobre Las Cruces	1.8	2	3.8	3.6	7.4
Guelb Moghrein	5.8	0	5.8	2.0	7.8
Kansanshi	5.2	0.6	5.8	2.9	8.7
Cobre Panamá	6.3	0.3	6.6	4.1	10.7
Group (Cu)	4.4	0.4	4.8	3.4	8.2
Tonnes CO_2e/ tonne Ni-EQ					
Ravensthorpe	11.9	0	11.9	8.5	20.4
Enterprise	-	-	-	-	-
Group (Ni)	11.9	0	11.9	8.5	20.4

	SCOPE 1	SCOPE 2	SCOPE 1 & 2	SCOPE 3	SCOPE 1, 2 & 3
	0.3	0.5	0.8	16.2	17.0
	0.4	1.3	1.7	4.5	6.2
	1	0.4	1.4	3.2	4.6
	3.6	2	5.6	7.7	13.3
	6.9	0	6.9	5.1	12.0
	6.5	0.6	7.1	3.3	10.4
	5.6	0.3	5.9	3.9	9.8
	4.4	0.4	4.8	3.6	8.4
	11.6	0	11.6	8.3	19.9
	0.7	1.1	1.8	3.0	4.8
	9.7	0.2	9.9	7.4	20.8

First Quantum scope 3 emissions breakdown

The assessment of Scope 3 emissions holds significant importance for mining corporations like First Quantum. Unlike Scope 1 and 2 emissions, which cover direct and indirect emissions from owned or controlled sources, Scope 3 emissions encompass a broader spectrum, including all indirect emissions in the organisation's value chain. For First Quantum, this involves scrutinizing a vast network of upstream and downstream activities, from purchasing goods and services to product distribution and processing. We recognise the importance of comprehensive environmental impact disclosure and focus on specific calculations to ensure accuracy and reliability in our reporting. Our methodology, while excluding amounts lacking confidence due to scale-up methods, sets the stage for future enhancements in our emission accounting practices. Below, we present our most material categories of Scope 3 emissions, including those contributing more than 5% to our total, reflecting our commitment to transparency and accountability.

In the category of purchases of goods, services, and capital goods (categories 1 & 2), our most substantial Scope 3 emission area encompasses over 50% of the total spend. This includes all our largest spend areas, underscoring the thoroughness of our specific calculations and our commitment to comprehensively addressing our environmental impact across diverse operational facets.

Scope 3 category	Source	2022 tCO_2e	2022 %	2023 tCO_2e	2023 %
1&2	Purchased goods, services and capital goods	1 403 000	43%	1 294 000	44%
3	Fuel and energy	665 000	20%	637 000	22%
9	Downstream transportation and distribution	209 000	6%	191 000	6%
10	Processing of sold products	999 000	31%	841 000	28%
Total		**3 276 000**		**2 963 000**	

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, but are not limited to, estimates, forecasts, and statements as to the Company's future production levels; estimates, forecasts and statements as to the Company's plans, targets and commitments regarding greenhouse gas emissions as well as its approach to climate change-related physical and transition risks and opportunities (including intended actions to address such risks and opportunities); the expected growth in levels of demand for copper and nickel and the impact thereof on the Company's business and prospects; the Company's expectations regarding the role of copper and nickel in the global transition to a low carbon economy and socioeconomic development, including on the achievement of the United Nations Sustainable Development Goals; the Company's expectations regarding increased demand for copper and nickel and the causes thereof; the Company's ability to supply essential metals for the shift to a low-carbon economy and socioeconomic progress; targeted levels of reduction in absolute greenhouse gas emissions and carbon intensity for copper mined; the Company's 2025 and 2030 target emissions and targeted Scope 1 and Scope 2 emissions (including overall emissions and percentages attributable to coal, electricity, fuel, ore leaching and other activities or inputs); the decarbonising of power used in the Company's operations, including use of 100% renewable power at the Company's Zambian operations and the transition away from coal at Cobre Panamá and expected timing thereof; investments in improving the climate resilience of the Company's operations; the incorporation of carbon pricing in the evaluation of new projects, including identification of feasible sources of renewable power; anticipated capital expenditures to decarbonise power sources and otherwise deliver climate change benefits, including an upgrade of the Kansanshi smelter to increase processing capacity, the development of a wind farm at Ravensthorpe, the use of trolley assist technology to improve operational and energy efficiency; the physical risks of climate change including on tailings storage facilities and dams, mining activities, power supply at its projects, the Company's supply chain, host communities and their expectations of the Company, health and safety of the Company's staff, water management and infrastructure damage at the Company's projects; and the transition risks associated with climate change, including greenhouse gas emissions pricing and reporting requirements, shifts in energy policies, the costs of transitioning to new technologies, risk of failure of newly-adopted technologies, changing customer behaviour, increases in the cost of inputs and the possible reduction in availability of capital as a result of sector stigmatisation and/or pressure to decarbonise.

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 about, among other things, the geopolitical, economic, permitting and legal climate in which the Company operates; continuing production at all operating facilities; the future price of copper, gold, nickel, silver, iron, cobalt, pyrite, zinc, sulphuric acid and other commodities; exchange rates; anticipated costs and expenditures; mineral reserve and mineral resource estimates; the impact of acquisitions, dispositions, suspensions or delays in the Company's business; the success of the 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, the scale and pace of decarbonisation and certain climate data projections.

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; 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 to be 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 forward-looking 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.

References

Cover image: Reforestation efforts at Cobre Panamá	Cover Page
International Energy Agency (IEA) World Energy Outlook (WEO) 2022 – Analysis, 2022	9
The Climate Change Knowledge Portal (CCKP), Country Vulnerability, https://climateknowledgeportal.worldbank.org, Accessed 2023	15

www.first-quantum.com

FIRST QUANTUM
MINERALS LTD.