



ENVIRONMENT, SAFETY AND SOCIAL DATA REPORT

2019



CEO'S STATEMENT

This is the third report presenting our Company's performance against a number of globally accepted environmental, safety and social standards. Not only does the report provide data and information on our activities, it is evidence of our commitment to transparency and a recognition of the Company's impact both locally and regionally, and on the broader global environment.

In 2019, our Cobre Panama Project ramped up its mining, processing and power generating activities and this has resulted in an increased energy use and water consumption, and greenhouse gas emissions. We continue to focus our efforts to reduce resource consumption and wastage and improve efficiencies across all of our operations.

First Quantum is committed to continuous improvement through its environmental, safety and social management systems, which are subject to regular external audits. I hope you will find the information presented herein both informative and useful, and I look forward to reporting on our environmental, safety and social performance in future years.



Philip K. R. Pascall
Chief Executive Officer

Front Cover: Closed Samatosum Mine, British Columbia, Canada.



First Quantum recognizes its obligation to extract resources responsibly and in a sustainable manner. This responsibility extends from the communities immediately adjacent to and around our operations to our resource consumption and its impacts on the broader global environment. We aim to meet this obligation through the integration of sound environmental, safety and social management practices into all aspects of our business. Furthermore, First Quantum is committed to continuous improvement through its environmental, safety and social management systems, which are subject to regular external audits.





FOREWORD

This report presents the environmental, safety and social performance of First Quantum for 2019. All data was collected internally. As with previous years, 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. Where data conforms to the requirements of the Global Reporting Initiative (GRI), the relevant code has been referenced. Notes provide further background and clarity to the data presented.

DATA COLLECTION AND STANDARDS

Greenhouse Gas and Water Data have been collected in accordance with the Greenhouse Gas Protocol (WRI, WBCSD) and the Water Accounting Framework (Minerals Council of Australia, 2014) respectively. In addition to the data presented for the 2019 calendar year, some historic data has been updated. A separate GRI Content Index Report will be made available on our website. The GRI Content Index Report will provide additional links and data.

A summary of the GRI disclosures listed in this report are as follows:

- **GRI 302-1:** Energy consumption within the organization;
- **GRI 302-3:** Energy intensity;
- **GRI 303-1:** Total water withdrawal by source;
- **GRI 303-3:** Percentage and total volume of water recycled and reused;
- **GRI 304-1:** Operational sites in protected and high biodiversity areas;
- **GRI 304-2:** Significant impacts of activities on biodiversity;
- **GRI 304-4:** Endangered species in operational areas;
- **GRI 305-1:** Direct Greenhouse Gas (GHG) emissions (Scope 1);
- **GRI 305-2:** Indirect Greenhouse Gas (GHG) emissions (Scope 2);
- **GRI 305-4:** Greenhouse Gas (GHG) emissions intensity;
- **GRI 305-7:** NO_x, SO_x, and other significant air emissions;
- **GRI 306-2:** Total weight of waste by type and disposal method;
- **GRI 403-2:** Rates of injury, severity rates and number of work related fatalities;
- **GRI 411:** Rights of indigenous peoples;
- **GRI 412:** Human rights assessment;
- **GRI 413-1:** Operations with local community engagement, impact assessments and development programs;
- **GRI 413-2:** Operations with significant actual and potential negative impacts on local communities.

ABBREVIATIONS AND ACRONYMS

- **KT (kilotonne)** - a thousand (10³) 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;
- **CU-eq (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 pegged to either a single point in time or averaged over a period;
- **CO₂-eq (carbon dioxide equivalent)** - a measure to normalize the impact of different GHGs in terms of the amount of CO₂ that would create the same amount of warming.



SUSTAINABILITY

CONTEXT

Given the significant risks and potential impacts associated with developing and operating mines, the Company has committed to adopting a cautionary approach in all of its business activities. This commitment is best illustrated in the Company's sustainability strategy, environment, social and safety policies. We recognize environmental management as a corporate priority and ensure that all potential impacts or consequences on the environment are given proper assessment and consideration. Furthermore, the Company commits to develop, implement and continually update our environmental management systems to manage, reduce and where possible prevent environmental pollution relating to our activities, products and services. In our social policy, we commit to building relationships that are based on transparency, mutual trust and respect. Importantly, the Company also commits to listening and communicating with stakeholders and local communities directly and openly about our activities, issues and future plans. Finally, in our safety policy, we commit to including safety and health considerations as an integral part our activities. We also commit to take all reasonable and practicable measures to ensure that potentially hazardous agents and conditions in the work place are identified and managed safely.

SUSTAINABILITY STRATEGY

First Quantum Minerals Limited is committed to making positive steps in sustainable development at its worldwide operations. Our Sustainability Strategy is built around four key pillars:

- Economically viable investments;
- Technically appropriate operations;
- Environmentally sound practices;
- Socially responsible actions.

The First Quantum Sustainability Strategy is available on our website. To deliver on our strategy, we have established a number of policies, practices, management systems and reporting commitments, including:

- Sound corporate governance practices;
- Comprehensive Code of Conduct, which applies to all permanent employees and contractors (including security contractors), and is part of mandatory training requirements for full-time and part-time employees. The Code of Conduct references an internal Whistle-blower Policy and provides contact details for raising concerns;
- Environment, Health, Safety and Corporate Social Responsibility Committee of the Board;
- Integration of safety metrics into executive compensation;
- Environmental Policy, available on www.first-quantum.com;
- Human Rights Policy, available on www.first-quantum.com;
- 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 OHSAS/BSI 18001:2015 standard at all operations;
- Reporting on the safety and security of our tailings storage facilities;
- Tax transparency and contributions to governments reporting.

Environmental, Safety and Social management oversight is provided by our Group Environmental and Safety Managers, who report to the Chief Executive Officer and Director of Operations respectively. On-site responsibility for adherence to our safety and environmental policies, and compliance with our safety and environmental management systems (including commitments to reduce energy use, emissions, water and waste) rests with the business units.

MATERIALITY

We believe that the metrics presented in this report reflect our most significant impacts and are relevant to us and our stakeholders. When deciding on what aspects to report on, the Company considered the following:

- Direct economic, environmental and social impacts of our activities;
- Expectations and feedback of our stakeholders. Our stakeholders include but are not limited to local communities, employees, civil society organisations, non-governmental organisations, government and regulators, investors, customers, suppliers and media;
- Priorities identified by the board of directors;
- Risks identified through our group business risk registers;
- Regular review of our legal and regulatory requirements;
- Environmental and Social topics of international concern and regular reviews of growing industry reporting standards and norms.

BOUNDARY

Our disclosure covers all activities at our operations and closed properties where we have financial control. Our disclosure also includes data from our supporting offices. Operating sites include Kansanshi and Sentinel in Zambia, Cobre Panama in Panama, Las Cruces in Spain, Guelb Moghrein in Mauritania, Cayeli in Turkey and Pyhäsalmi in Finland. Our Ravensthorpe Operation remained on care and maintenance in 2019 and data was only included where relevant. Closed properties include Bwana Mkubwa in Zambia, Lac Dufault, Samatosum, Sturgeon and Winston in Canada and Copper Range in the United States of America. Support offices include London, Perth, Johannesburg and Toronto. Unless stated, Development Projects, all other joint ventures and exploration projects are not included in this disclosure. Biodiversity data was limited to Cobre Panama.

WHISTLE BLOWER POLICY

First Quantum Code of Conduct, which is available on our [website](#), provides both internal and third party contact details for reporting complaints or issues of concern. The Policy provides a process through which complaints by employees of alleged violations of law, regulation or internal policy may be communicated, whether personally or anonymously, to the Company or an independent third party.



ENERGY CONSUMPTION

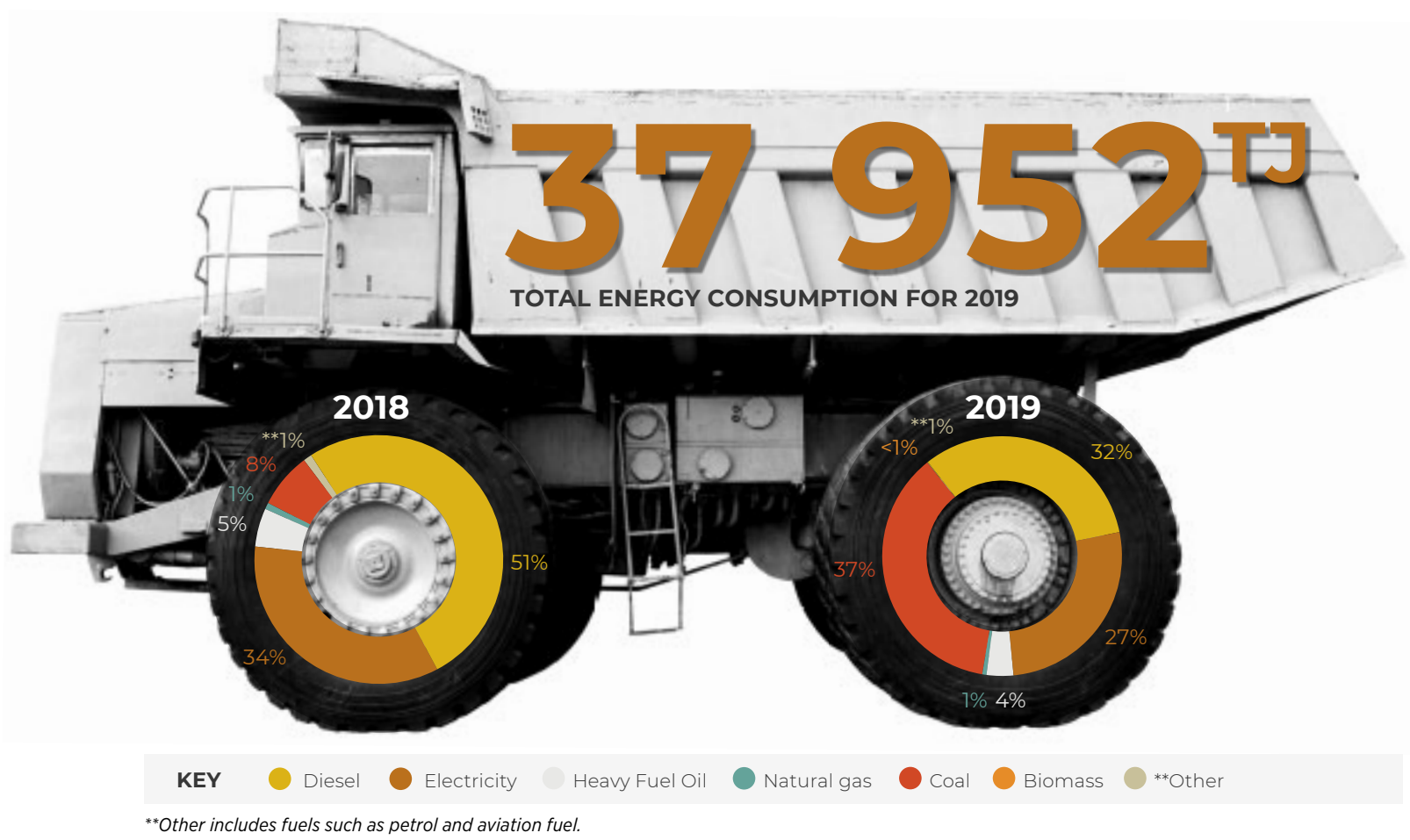
2018 – 2019

Significant amounts of energy are required for mining, processing, smelting and transportation activities. In addition to being a material cost, we recognize the environmental impacts associated with the generation of energy. First Quantum has a core commitment to minimise energy consumption by continually challenging the status quo, improving efficiencies and reducing wastage.

In 2019, overall group energy consumption increased significantly due to the commissioning of the Cobre Panama Project. Excluding Cobre Panama, energy consumption across the Group was marginally down in 2019. As with previous years, the electrification of our Zambian mining fleet and in-pit crushers contributed to lower diesel consumption. Our Energy consumption per ton of copper equivalent produced was also higher in 2019, again as a result of increased consumption at Cobre Panama. Our Energy Intensity is expected to improve in 2020 as Cobre Panama reports on a full year of production.

For the conversion of fuels to energy, we have used the United Kingdom Government Greenhouse Conversion Factors for our Company Reporting. For all other sites, electricity generation by source values was obtained from 2018 International Energy Association's (IEA) World Energy Statistics. It was conservatively assumed that electricity generation of all other activities (exploration and projects) have a 50:50 split between coal and gas.

GRI 302-1 GROUP ENERGY CONSUMPTION (TJ)



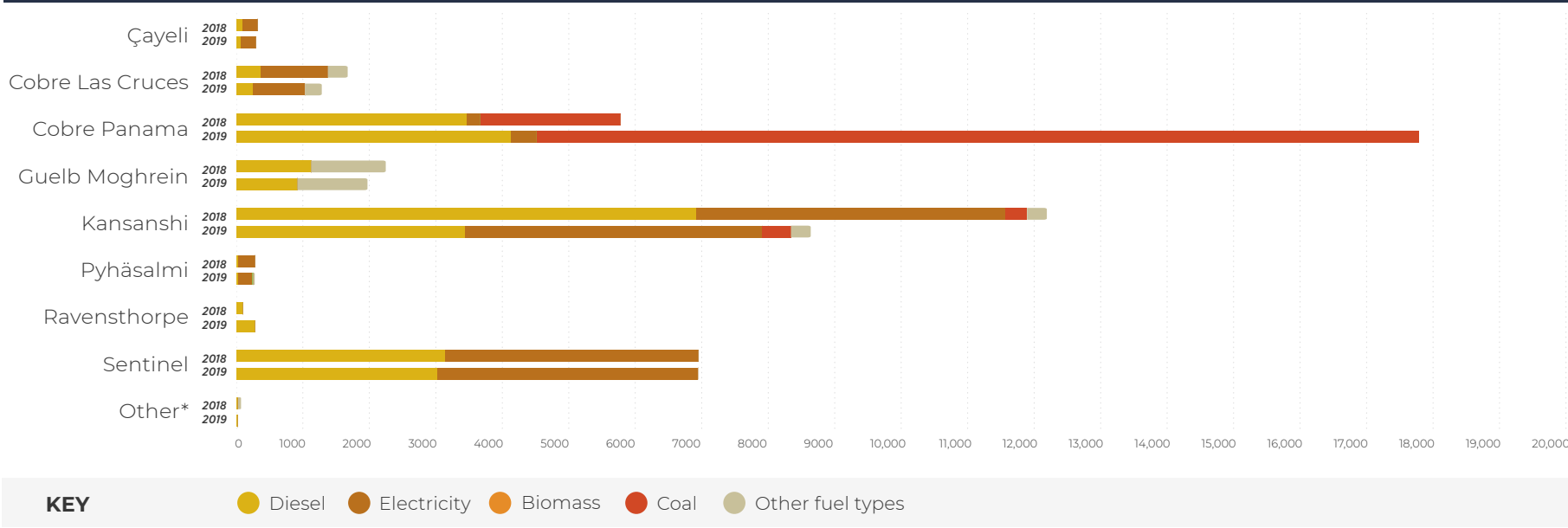
24%
OF ALL **ENERGY** CONSUMED IS FROM **RENEWABLE SOURCES**

↑ 0.5%
INCREASE OF TOTAL MINE **PRODUCTION** (TONNE CU-EQ) IN 2018

ENERGY INTENSITY
55
GJ/TONNE CU-EQ (**UP 21%**)

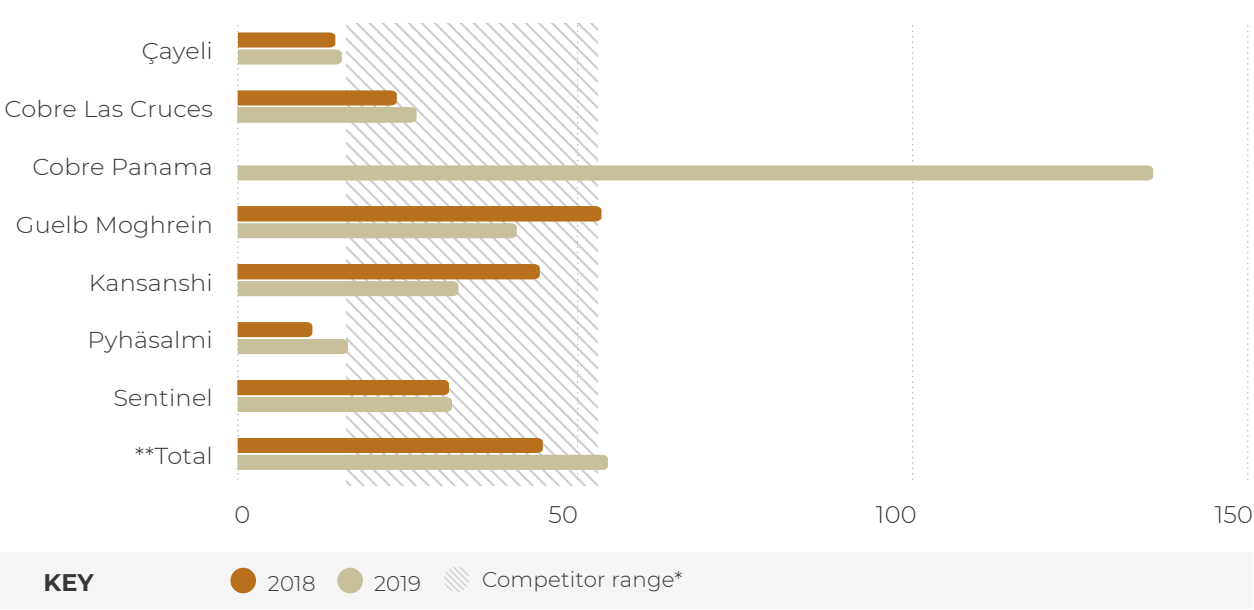
5 593 TJ
FROM COBRE PANAMA'S COAL POWER STATION, WAS SOLD TO THIRD PARTIES

ANNUAL ENERGY CONSUMPTION PER SITE (TJ)



****Other** includes projects, closed properties and support offices. Note that electricity sold from coal consumption at Cobre Panama is excluded from this number.

302-3 ENERGY INTENSITY (GJ/TONNE CU-EQ)



****Total** intensity value includes all energy consumption across the group (not only operational sites). This excludes the energy produced at Cobre Panama that was sold. Ravensthorpe was excluded as it was in care and maintenance in 2019.
***Source:** Digging Deep: Which Miners Are Facing up to the Low-Carbon Challenge, 2017, CDP: Tarek Soliman, Luke Fletcher and Tom Crocker.



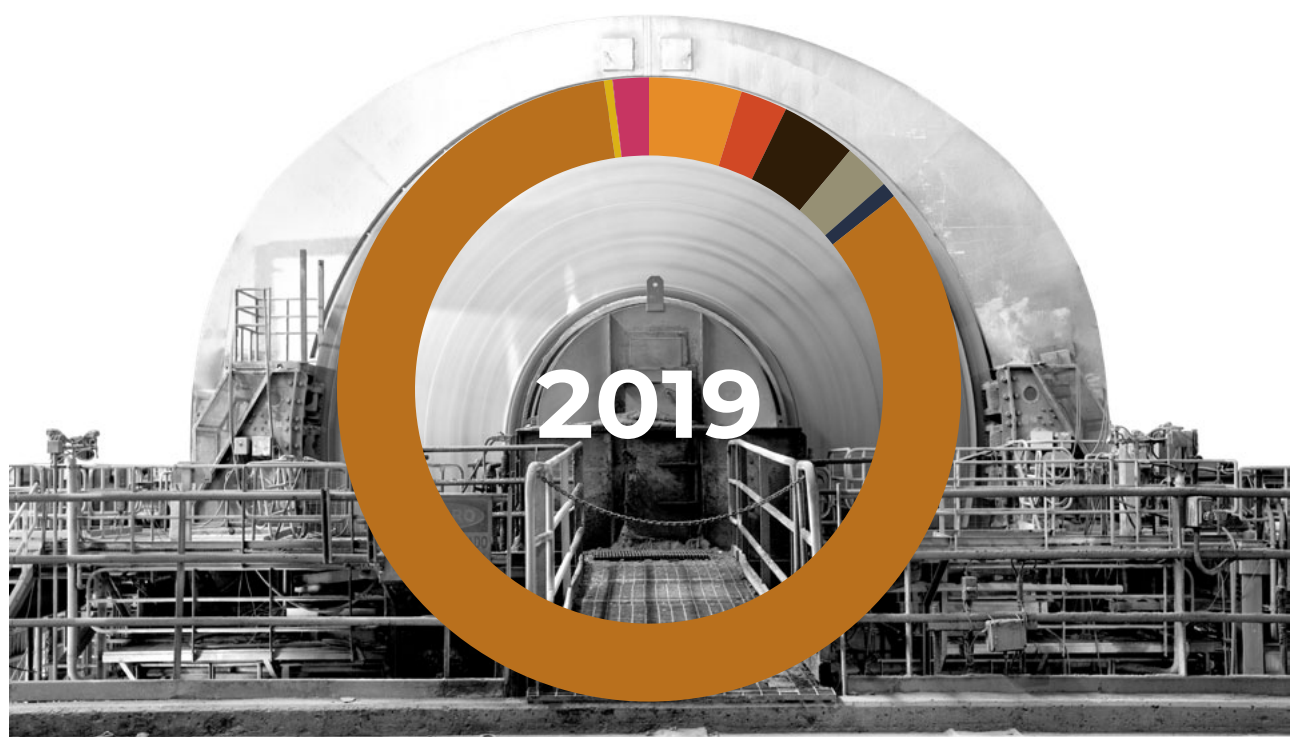
PURCHASED ELECTRICITY CONSUMPTION

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.

In 2019, Scope 2 emissions dropped marginally. The drop is attributed to less power being consumed at Cobre Las Cruces and Kansanshi. As with previous years, close to 90% of our purchased group electricity is generated by renewable energy.

NOTES
For Guelb Moghrein, a 50:50 split between coal and gas was applied.
For all other sites, electricity generation by source values was obtained from 2018 International Energy Association's (IEA) World Energy Statistics.
It was conservatively assumed that electricity generation of all other activities have a 50:50 split between coal and gas.

PURCHASED GROUP ELECTRICITY CONSUMPTION (TJ)



10 128^{TJ}

TOTAL ELECTRICITY CONSUMPTION FOR 2019

89%

OF ELECTRICITY CONSUMPTION IS FROM RENEWABLES

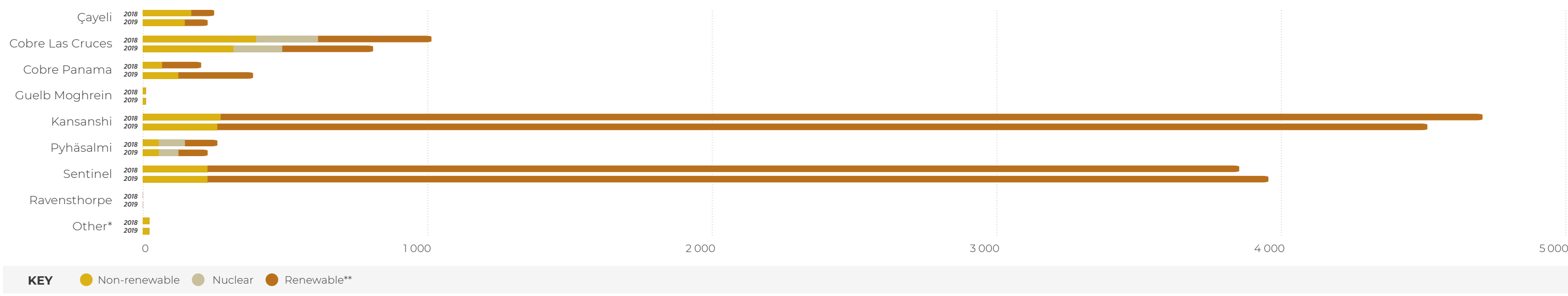
83%

OF THE GROUPS PURCHASED ELECTRICITY CONSUMPTION IS HYDRO-ELECTRICITY

↓ 2%

REDUCTION IN ELECTRICITY CONSUMPTION

PURCHASED SITE ELECTRICITY CONSUMPTION (TJ)



*Other includes projects, closed properties and support offices.
**Renewables include hydro-electricity, biofuels and waste, solar, geothermal and wind.



EMISSIONS

2016 – 2019

SCOPE 1 AND SCOPE 2

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

In 2019, our Scope 1 Greenhouse Gas emissions increased significantly due to the commissioning of the Coal Fired Power Plant at Cobre Panama. Greenhouse Gas emissions at our Zambian operations increased marginally in 2019. Our Scope 2 emissions decreased marginally in 2019.

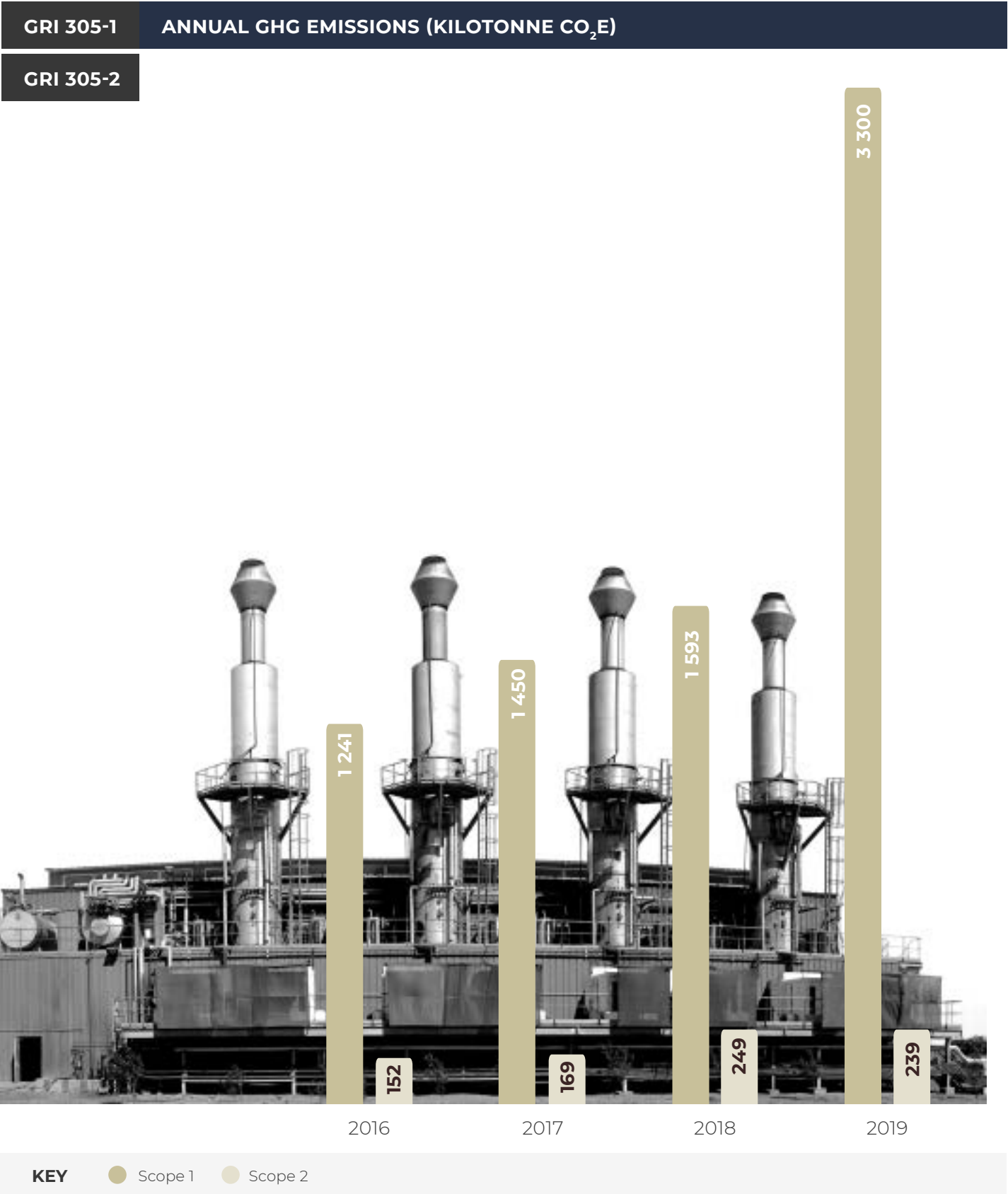
All our carbon emissions are calculated in accordance with the Greenhouse Gas Protocol; A Corporate Accounting and Reporting Standard (WRI, WBCSD, 2001). We report our Greenhouse Gas emissions data and relevant emissions management efforts annually to the Carbon Disclosure Project (CDP). For the conversion of Fuels to Energy, we have used the United Kingdom Government Greenhouse Conversion Factors for Company Reporting.

NO_x AND SO₂

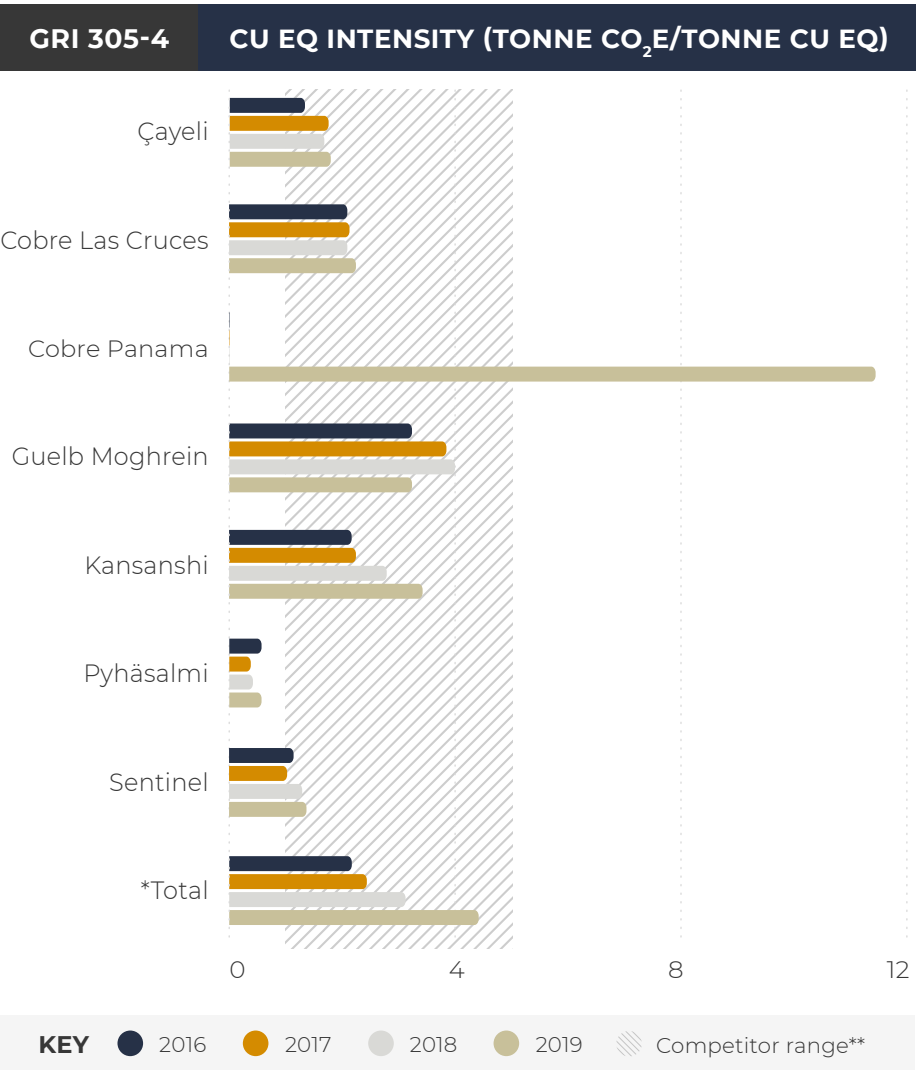
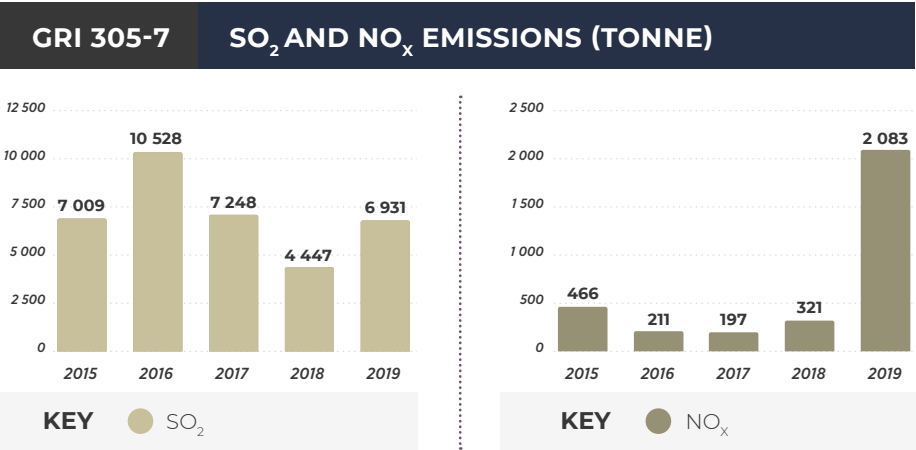
Nitrous Oxide (NO_x) and Sulphur Dioxide (SO₂) emissions are monitored at a number of fixed emission points at our operating sites. The results therefore represent a cumulative value. First Quantum's SO₂ emissions were up marginally, while the NO_x emissions are up significantly. Again, the increase in both gases are as a result of emissions from the Cobre Panama Coal Fired Power Plant.

CU EQ INTENSITY (TONNE CO₂ E/TONNE CU EQ)

Our CO₂ emissions per ton of copper equivalent produced was higher in 2019. This was as a result of increased consumption at Cobre Panama. While our overall Scope 1 emissions are likely to increase in 2020, our emissions intensity should improve as Cobre Panama reports on a full year of production.



NOTES
GHG emissions from projects, operating sites, closed properties and supporting offices are included.



*Total includes emission from operating sites, projects, closed properties and supporting offices. Emissions generated from smelting activities at Kansanshi are also included in the Cu-EQ intensity calculations.
**Source: Digging Deep: Which Miners Are Facing up to the Low-Carbon Challenge, 2017, CDP: Tarek Soliman, Luke Fletcher and Tom Crocker.



GHG EMISSIONS PER SITE (KILOTONNE)

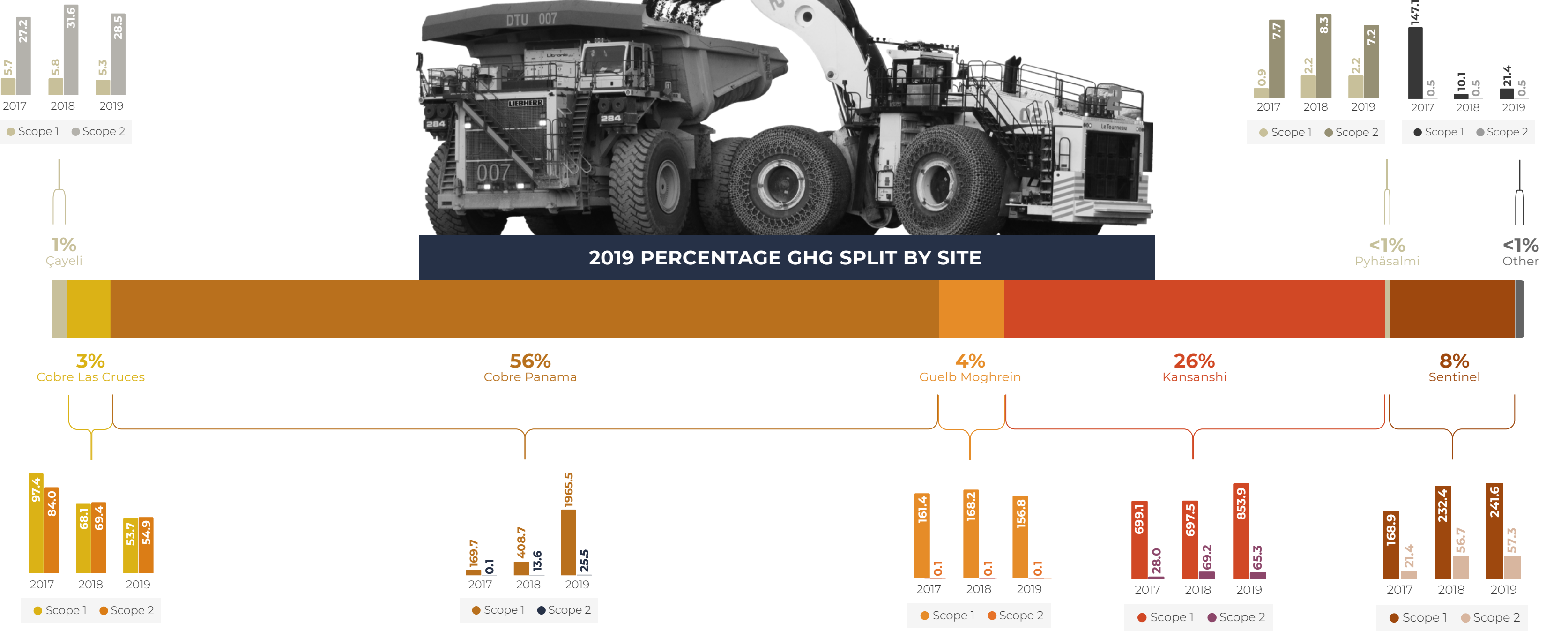
GRI 305-1
GRI 305-2

The percentage contribution of each site to group GHG emissions is provided below. While not to scale, GHG emissions from different sites over three years are provided to show trends.

NOTES
Other includes: Ravensthorpe, exploration, projects, closed properties and support offices.



2019 PERCENTAGE GHG SPLIT BY SITE



WATER

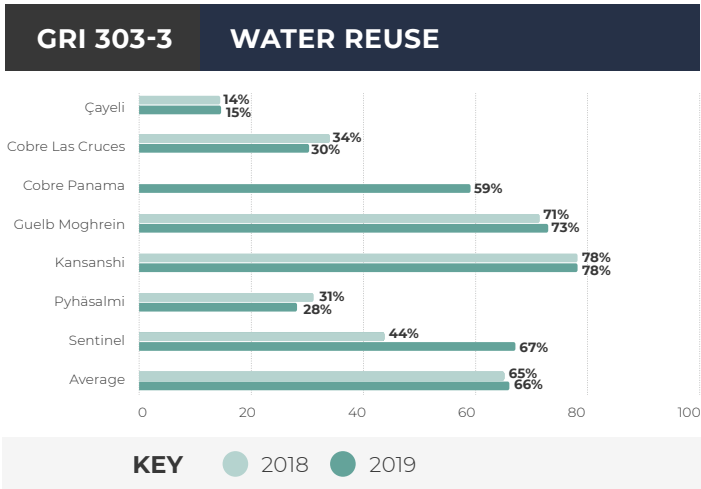
2019

Large quantities of water are essential for mining and mineral processing activities. Our water consumption is seen as having a material impact across 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.

In 2019, group water withdrawal and discharge increased significantly with the commissioning of the Cobre Panama Project. Large quantities of sea and fresh water are required for cooling the Power Plant and producing Copper Concentrate respectively. Water withdrawal and discharge volumes are likely to increase in 2020 as the project completes its first year of full production. Water withdrawal and discharge at our other operating sites remained similar to volumes recorded in 2018.

While initiatives to increase water reuse continued in 2019, overall water re-use was down in 2019 as a result of the commissioning of the Cobre Panama Project. Reuse is likely to increase in 2020 as Cobre Panama reaches full operating capacity.

We measure all water withdrawal and discharge in accordance with the Water Accounting Framework (WAF) for the Minerals Industry (Minerals Council of Australia, 2014). All definitions and categories have therefore been aligned with the requirements and specifications of the WAF. The volumes provided were collected by our staff and represent the best effort of our teams. All water measurements are taken by our in house teams on site.



NOTES
Only water use at our operating sites was used in determining the Company average.

GRI 303-1

WATER INPUT AND OUTPUT (MEGALITRE)

ESTIMATED WATER INPUT*

729 230

TOTAL WATER INPUT**

SURFACE WATER 234 981 (32%)

Precipitation & Runoff	193 027
Rivers and Streams	38 810
External Surface Water	3 144

GROUNDWATER 45 930 (6%)

Renewable	35 806
Non-Renewable	2 236
Ore Entrainment	7 889

SEA WATER 447 159 (61%)

Cooling Withdrawal (Ocean)	447 159
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3RD PARTY WATER 1 160 (<0.2%)

Contract/Municipal	33
Waste Water	1 127

**While every effort has been made to collect data that is accurate, it is not possible to account for every litre of water withdrawn or discharged at our operations. The total numbers are therefore an estimate based on the best efforts of our operations. The numbers within the graphic are as per the data collected at our operating sites.*



ESTIMATED WATER OUTPUT*

740 013

TOTAL WATER OUTPUT**

SURFACE WATER 178 878 (24%)

Discharge	178 878
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GROUNDWATER 26 778 (4%)

Aquifer (Seepage and Re-injection)	26 778
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SEA WATER 450 762 (61%)

Discharge (Ocean)	450 095
Discharge (Estuary)	667

SUPPLY TO 3RD PARTY 4 (<0.05%)

Municipality	4
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OTHER 83 591 (11%)

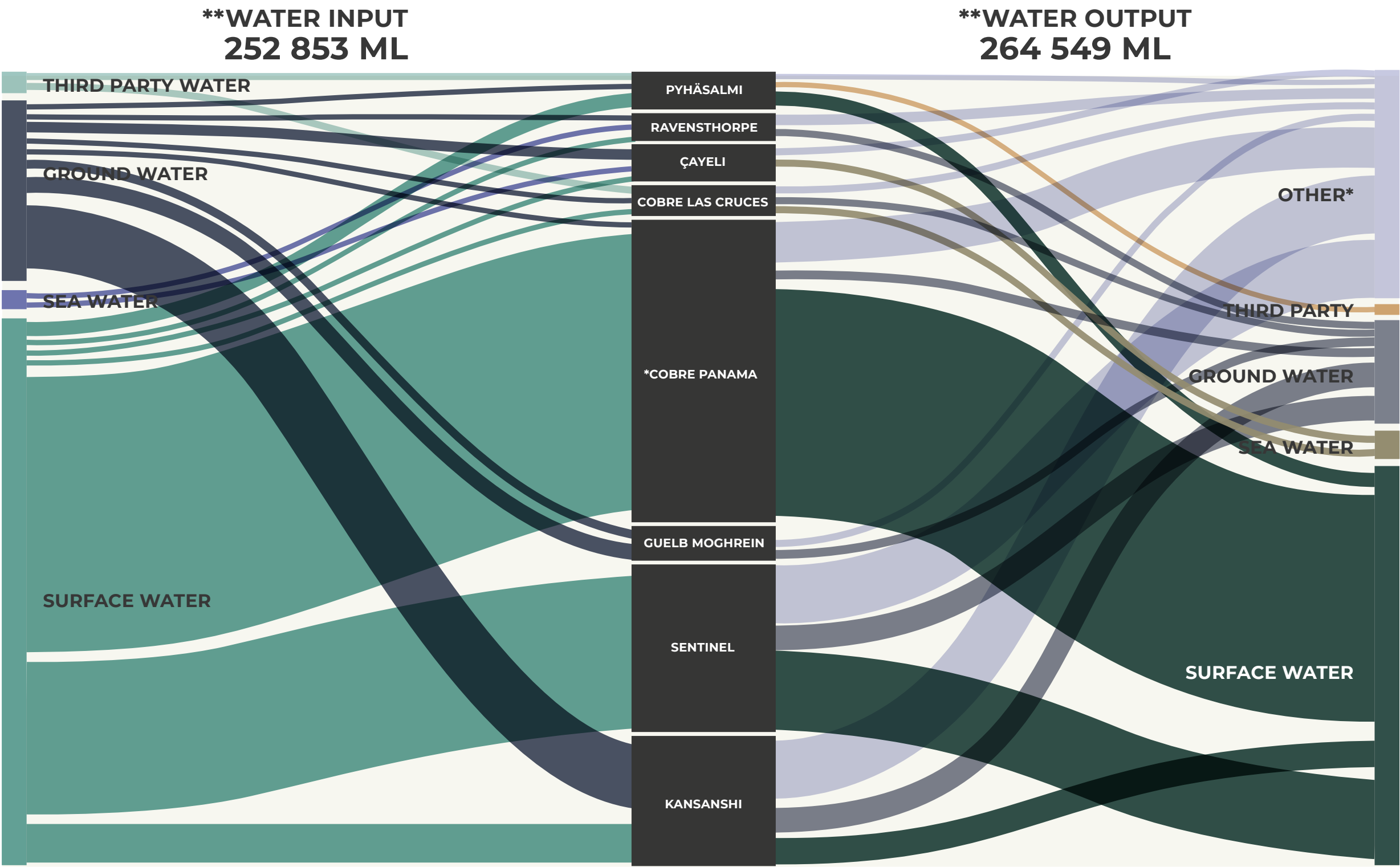
Evaporation	36 793
Entrainment	46 136
Task Loss and In Product	662

**Total refers to all sites



WATER INPUTS AND OUTPUTS PER MINE

2019



SALINE WATER

APPROXIMATELY 60% OF WATER INPUT AT GUELB MOGHREIN IS SALINE GROUNDWATER.

*WATER USAGE FOR POWER PRODUCTION

AN ADDITIONAL 446 748 MEGALITRE OF SEA WATER IS USED FOR COOLING THE COBRE PANAMA POWER PLANT. ALL OF THE SEAWATER IS DISCHARGED BACK INTO THE SEA. FOR ILLUSTRATIVE PURPOSES, THE SEA WATER USED FOR COOLING THE COBRE PANAMA POWER PLANT HAS BEEN EXCLUDED FROM THE ADJACENT GRAPHIC.

*Other outputs are predominately evaporation (over 50%) and tailings entrainment.

** Total refers to operational mines only.



WASTE

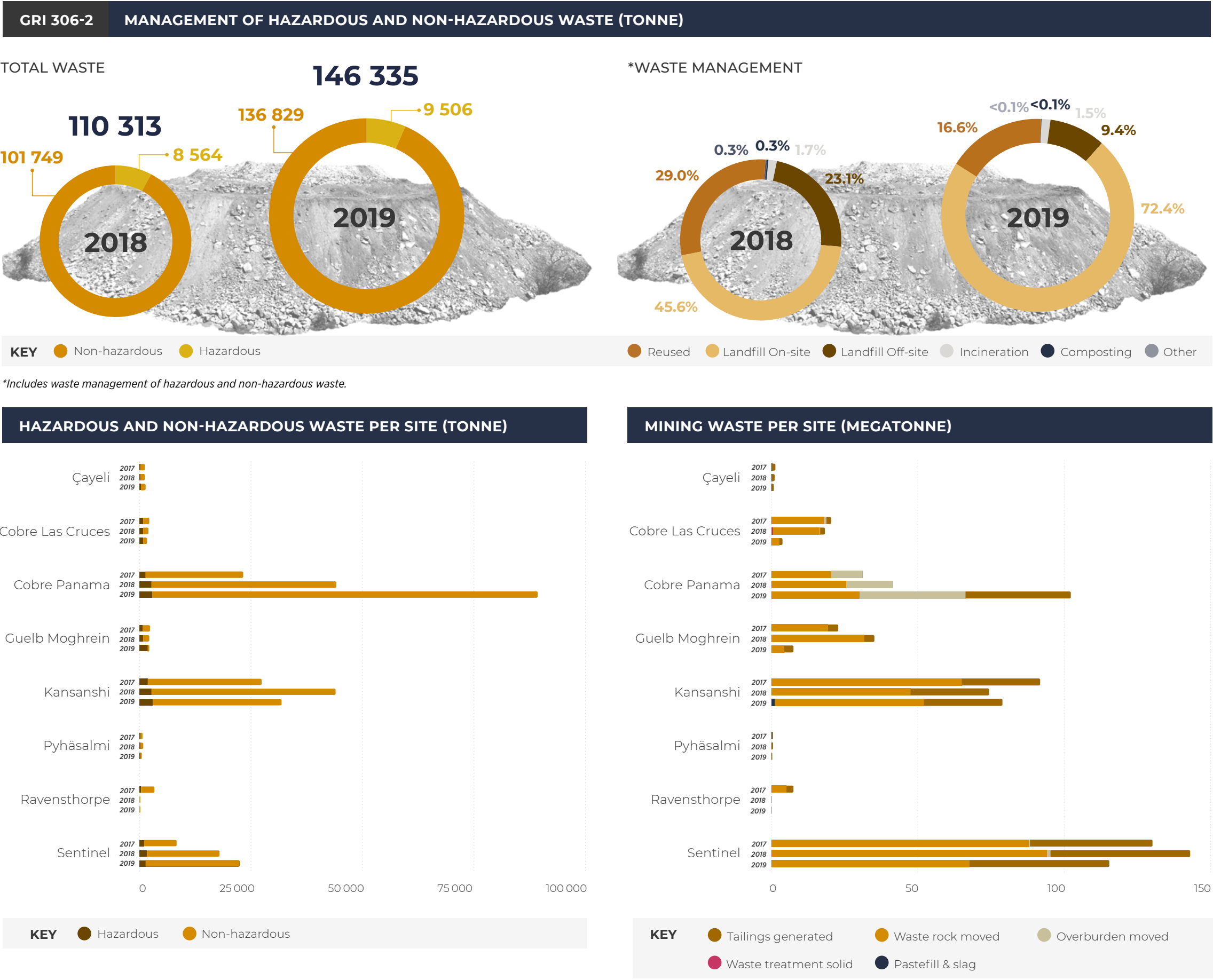
2017 – 2019

While significant progress has been made in reducing, reusing or recycling waste in recent years, the mining industry still generates a large amount of waste. First Quantum generates the following waste at its operations:

- Hazardous Waste - includes used lubricants and process related chemicals;
- Non-hazardous Waste - includes organic matter, wood and plastics;
- Mining Related Waste - includes waste from mining activities such as overburden, waste rock, tailings, smelter slag and waste treatment solids. Waste rock is typically stored in waste rock dumps adjacent to pits. Processing operations generate tailings which are deposited in tailings storage facilities. Smelting activities generate slag which is stored in dedicated slag dumps. Waste treatment solids are generated during the treatment of mine affected water;
- Recycled waste - includes waste oil and scrap metals.

Increased non-hazardous waste volumes in 2019 are attributed to increased activities at Cobre Panama and Trident. Increased mining waste in 2019 is related to increases in mining and processing volumes at Cobre Panama.

All waste is measured by our in house teams on site.

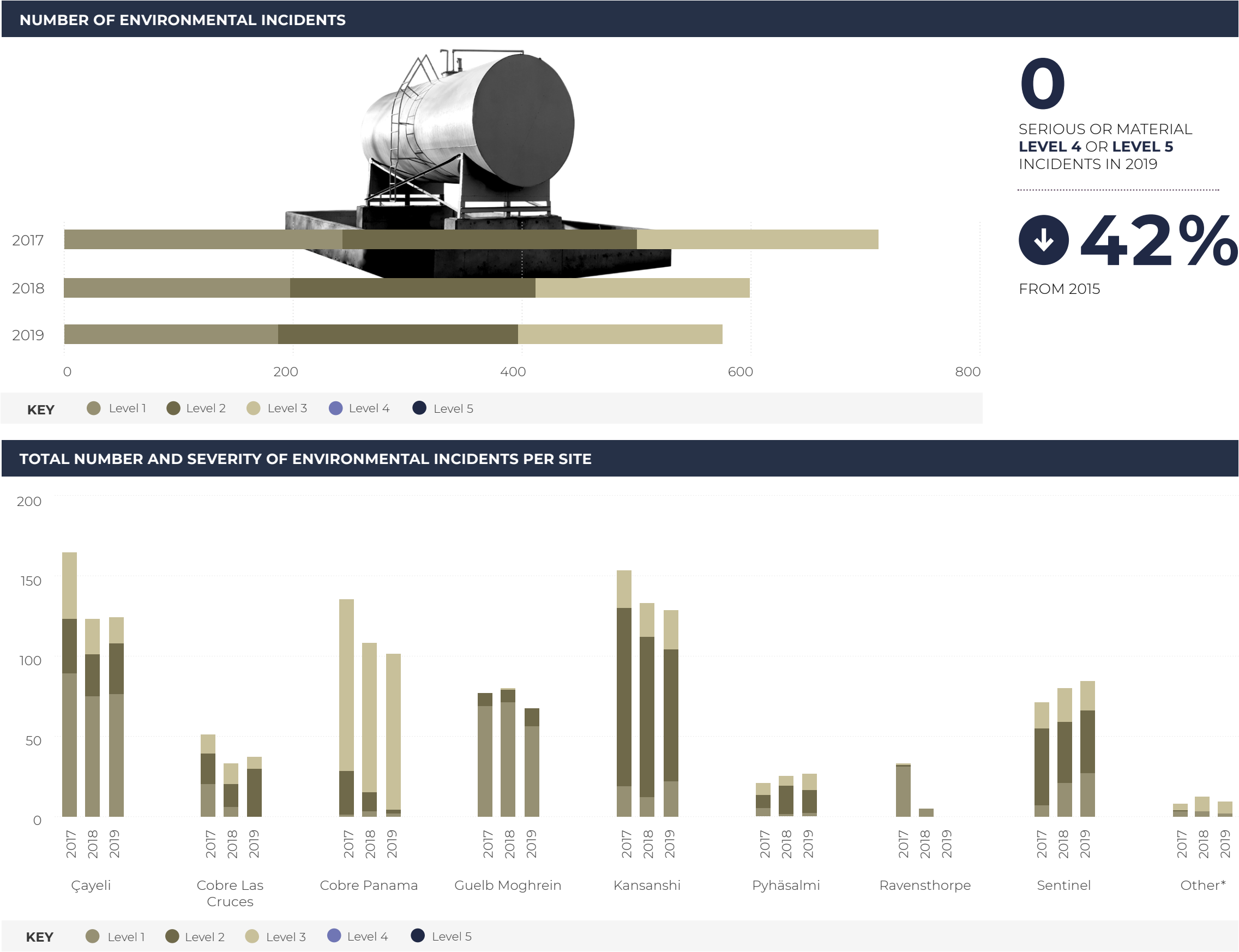


ENVIRONMENTAL INCIDENTS

2017 – 2019

First Quantum believes 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 regular external compliance audits. The Company has established EMS compliance targets for selected sites to further reduce environmental risk across the group. As part of the EMS, the Company has implemented a five tier environmental incident classification system. Incidents with no measurable impact are recorded as Level 1 incidents, while incidents with far reaching environmental impacts are recorded as Level 5 incidents. All operations are required to record and report incidents monthly according to the 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.

In 2019, we again saw a steady decrease in incidents across the group with no Level 4 or 5 incidents reported. While narrowly missing our target of a 5% reduction in total group and Level 3 environmental incidents, we again showed an improved performance against 2018. Since 2015, we have reduced total group environmental incidents by a total of 42%. The decrease in incidents is attributed to a combination of factors including our EMSs reaching a mature state at a number of our larger sites and ongoing initiatives aimed at eliminating risk. In 2020, the Company has again established a target of reducing group wide and Level 3 environmental incidents by 5% and 10% respectively.



COBRE PANAMA BIODIVERSITY

The Cobre Panama Mine lies entirely within the Mesoamerican Biological Corridor of the Panama Atlantic (MBCPA) and the Golfo de los Mosquitos 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 sites 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.

The three core biodiversity plans are described in more detail on this page.

GRI 304-1	GRI 304-2	GRI 304-3	2019 TOTAL LAND DISTURBANCE AND MINING CONCESSION AREAS					
Operating Site	Çayeli	Pyhäsalmi	Kansanshi	Cobre Las Cruces	Trident	Guelb Moghrein	Cobre Panama	Total
Total area under license (Ha) end 2019	9 074	412	9 434	3 200	95 000	8 100	12 955	38 175.1
Total Disturbance end 2019	17	219	5 632	1 056	5 171	429.5	3 042.5	15 567

Gastrotheca cornuta

PROTECTED AREA PLAN

Cobre Panama has committed to support three protected areas in the 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 indirect settlement pressures, 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.

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. Species-level management plans 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 has partnered with the following independent organisations:

- Houston Zoo (El Valle Amphibian Conservation Center) and the 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;
- Center for Snake Research (Centro para Investigaciones y Respuestas en Ofidología (CEREO)) at the University of Panama - reptile focus;
- Peregrine Fund - promotes the conservation of the Harpy Eagle;
- Missouri Botanical Gardens and the Field Museum - training of staff;
- National Herbarium of Panama - identification and description of plant species new to science;
- Royal Botanical Gardens, Kew - training of staff in techniques for seed storage, micro-propagation, and nursery techniques.

NOTES
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.



SAFETY

2017 – 2019

In line with our overall safety objective of recording no fatalities, the Company launched the 12 THINK Fatal Dangers initiative in 2018. The initiative highlighted the twelve main safety hazards that employees are exposed to and then focused attention and resources on mitigating the risks associated with these hazards. As with our safety policy and the original THINK campaign, the initiative was applicable to all operations, employees and contractors. While these are not our only hazards, the initiative hoped to raise employee awareness and reduce the number of incidents associated with these hazards by making employees better able to identify and manage the risks posed by these hazards. Further safety initiatives in 2019 included ongoing strengthening of the Health and Safety Management System (HSMS) and an increased attention on contractor management. The HSMS is compatible with the OHSAS 18001 standard and has been implemented at all of our sites. Independent auditing has shown a steady improvement in adoption and performance of the standard in recent years. In addition to adhering to our site protocols and safety standards, all contractors are provided with an induction and the required safety training to ensure that they are able to perform their work in a safe and efficient manner.

NOTES
Safety Data was included from all Operating and Closed Sites, Exploration Activities, Project Activities and our Ndola, Solwezi and Kalumbila Offices. Joint Ventures where we don't have full financial control and Support Offices not mentioned above were not included.

Other includes exploration, Bwana Mkubwa and FQM Roads & Earthworks.

DEFINITIONS

- **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.

NUMBER OF FATAL INCIDENTS



2017



2018



2019

GRI 403-2 LOST TIME INJURY FREQUENCY RATE

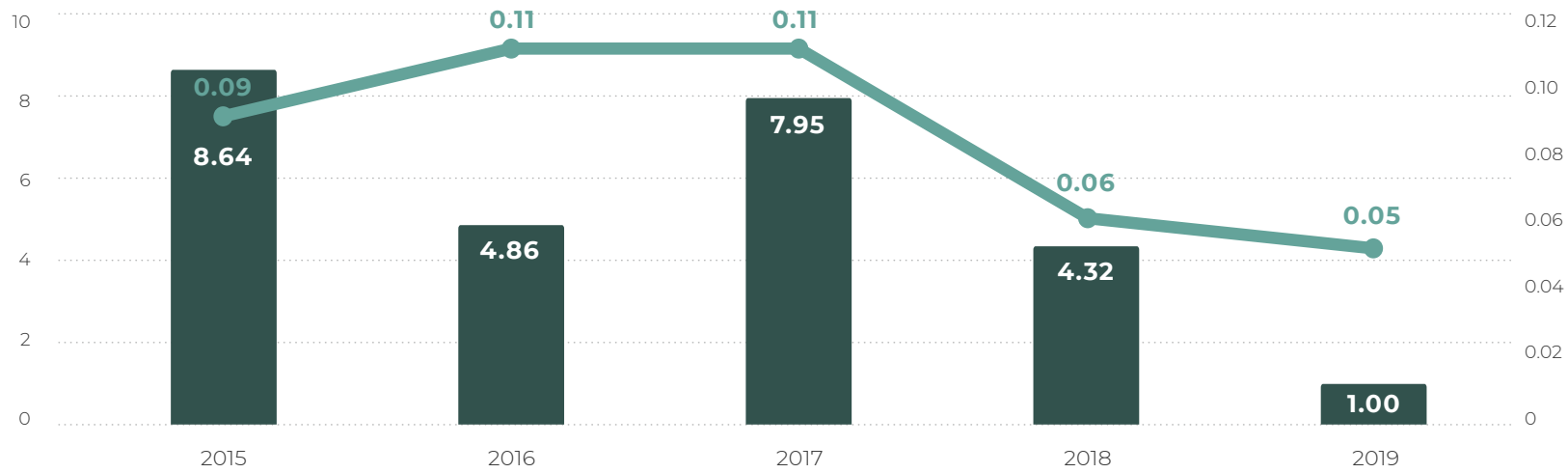
Çayeli	1.13	0.55	0
Cobre Las Cruces	0.10	0	0.28
Cobre Panama	0.10	0.04	0.08
Guelb Moghrein	0.08	0.06	0.00
Kansanshi	0.10	0.09	0.04
Pyhäsalmi	0	0.45	1.10
Ravensthorpe	0.95	0	0
Sentinel	0.08	0.05	0.02
Other	0	0	0
Group Rate	0.11	0.06	0.05

GRI 403-2 SEVERITY RATE

Çayeli	122.11	5.86	0
Cobre Las Cruces	1.36	0	2.10
Cobre Panama	2.37	4.55	2.20
Guelb Moghrein	3.64	4.91	0.00
Kansanshi	14.03	2.32	0.30
Pyhäsalmi	0	4.09	7.20
Ravensthorpe	15.20	0	0
Sentinel	2.88	7.22	0.30
Other	0	0	0
Group Rate	7.95	4.32	1.00

KEY 2017 2018 2019

ANNUAL SEVERITY AND LTI FREQUENCY RATES



KEY SFR LTIFR



12 THINK FATAL DANGERS INITIATIVE

- 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



TAILINGS STORAGE FACILITIES

DAM SAFETY MANAGEMENT



LOCATION AND NUMBER OF TSFs OWNED AND OPERATED BY FIRST QUANTUM

COUNTRY	ACTIVE	CLOSED
Australia	1	
Canada		9
Finland	1	
Mauritania	3	
Panama	1	
Spain	1	
United States of America		3
Zambia	3	1
Total	10	13

First Quantum has disclosed information on all of its active and closed tailings storage facilities as requested by the Church of England Pensions Board. This information is available on the Company website. <https://first-quantum.com>

DAM SAFETY MANAGEMENT

First Quantum manages 23 Tailings Storage Facilities (TSFs), of which 10 are active and 13 are closed. The Company has recognized potential TSF failure as one of its most significant risks. All of our TSFs have therefore been designed in accordance with the guidelines of the Australian National Committee on Large Dams (ANCOLD), the guidelines of the International Council on Metals and Mining (ICMM) and the Canada Dam Association (CDA). In an effort to further reduce the risk, operational controls are in place at each of our TSFs including:

- TSF management review and risk oversight by the Environmental, Health and Safety and Corporate Social Responsibility Committee;
- Quarterly or annual inspection, risk review and reports by independent dams specialist;
- Appointment of competent persons at the mine to manage the facility with all reporting directly to the Mine Manager;
- Use of approved operating manuals prepared for each TSF;
- Use of Emergency Response Plans for each TSF;
- Regular inspection by the day to day operators with overview 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;
- The installation of sophisticated instrumentation including piezometers (to measure the presence and level of the phreatic surface), slope indicators and settlement gauges to provide a detailed picture of the developing embankment;
- Interpretation of piezometric and associated data by external consultants on an annual basis or more frequently if determined by site conditions;
- Embankments regularly inspected for erosion, seepage and slumping;
- Groundwater quality monitored via peripheral water monitoring bores;
- Group technical staff regularly inspect the TSFs and review the operations with mine management. Recommendations are prepared to improve all aspects of the operation of the facilities.





LOCAL COMMUNITIES

GRI 413-1	GRI 413-2	COMMUNITY SUPPORT
Earning and maintaining community support for mining is fundamental to our Company's success. Globally, there is public concern about the perceived effect of mining on the environment and communities which is why First Quantum has implemented a comprehensive corporate social responsibility program that balances best practice with site-specific needs. Our initiatives and activities are consistent with international best practice and are carried out in a systematic 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 and traditional 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 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 Community Engagement 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;
- Work with communities to identify community investment opportunities that support local cultures and priorities.

These are also guided by our Human Rights Policy, which is guided by the principles of internationally recognized human rights norms, including the ILO Declaration on the Fundamental Principles and Rights at Work, and the 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. For more information, see the Biodiversity section of this report on page 13.

The Environment, Health and Safety and Corporate Social Responsibility Committee of the First Quantum Board of Directors has responsibility for oversight of our community engagement efforts.

Management of First Quantum's community engagement is overseen by a corporate Community Relations and Development Manager who provides 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 as needed.

Each site is staffed appropriately to manage community relations, including a local community relations manager.



LOCAL COMMUNITIES

COMMUNITY RELATIONS

Each of our projects and operating mines 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-for-profit 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.

All of our mines 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.

In addition to ongoing dialogue, each of our operations and projects has a grievance mechanism for receiving complaints and concerns from communities, and ensuring they are effectively responded to.

Engagement is continuous and ongoing as shown in our stakeholder maps and in the schedule and record of all engagement activities.

GRIEVANCE MANAGEMENT

Each of our projects and operations has a fully functioning grievance mechanism used to accept, assess and resolve community complaints related to Company activities. 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.

SITE	NUMBER OF GRIEVANCES RECEIVED 2019	GRIEVANCES RESOLVED WITHIN PRESCRIBED TIMEFRAMES
Çayeli	20	100%
Cobre Panama	66	100%
Guelb Moghrein	0	--
Haquira	0	--
Kansanshi	60	100%
Sentinel	18	94%

**An additional 90 grievances received were re-directed to the government ministries responsible for the issue*

SOCIAL IMPACT

Each of our projects and operations conducts ongoing social impact reviews and proactively and actively manage these impacts to the greatest degree possible.

This is an ongoing activity focused on identifying, assessing, avoiding, mitigating and enhancing outcomes for host communities and is embedded in community engagement and development activities and informed by community baseline studies.

Formal Social Impact Assessments have been conducted as part of the Environmental and Social Impact Assessment process required for a project's financing. Impact Assessments are also embedded into Resettlement Action Plans.

SITE	SOCIAL ASSESSMENT NAME	DATE
Bwana Mkubwa	Resettlement Action Plan	2019, ongoing
Çayeli	Social Closure Assessment	2014, ongoing
Cobre Panama	Environmental Social Impact Assessment	2011
	Resettlement Action Plan	2012
Guelb Moghrein	Social Closure Assessment	2018, ongoing
Haquira	Resettlement Social Impact Assessment	2014
Kansanshi	Smelter Road Resettlement Action Plan	2015
	Northern Resettlement compensation and livelihood restoration plan	2019
	Kabitaka South continuation ESIA	Ongoing
Sentinel	Kalumbila Resettlement Action Plan	2015



COMMUNITY DEVELOPMENT

OUR APPROACH

Each of our sites has a community social and economic development plan which is aligned with the United Nations Sustainable Development Goals (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 mines, 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.

In 2019, the Company contributed \$19.8 million in community programs.

KEY PERFORMANCE HIGHLIGHTS

ZAMBIA

- Entered into a Memorandum of Understanding with the Ministry of General Education to strengthen access to quality education in Solwezi and Kalumbila districts;
- Provided lunch to 6 000 school children every day;
- Working with 7 000 farmers in conservation farming and holistic family nutrition programming;
- Support 7 000 individuals in First Quantum-sponsored village banking programming.

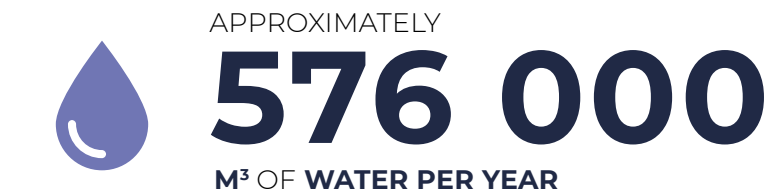
PANAMA

- Supported 36 agricultural cooperative groups and 182 individual farmers through the Company’s Agro-extension program;
- Scholarship Program;
- Sustainable Schools;
- Road Safety Program;
- First Response and disaster response training for communities.

MAURITANIA

- Drilled six additional boreholes in Akjoujt and provided equipment to local government to drill an additional 11;
- Supplied Akjoujt city with 1 200m³ of water per day and communities along the pipeline with 400m³ per day, total provision of 576 000m³ of water per year;

- Provided supplementary courses for all students in Akjoujt preparing for final school exams;
- Trained three young adults in solar power equipment installation and repair;
- Trained ten young people in brick making;
- Trained 20 people on micro projects planning and management;
- 125 women participated in an adult literacy program and seven groups of women benefited from our revolving loan fund intended to promote small business;
- Akjoujt hospital was flooded in August 2019 and the Company assisted through the temporary installation of generators and repair;
- The Company provides vehicles for Inchiri province children vaccine program.



HUMAN RIGHTS

OUR APPROACH

While governments have the primary duty for protecting human rights, we recognize that we must respect human rights within our sphere of influence. We also recognize that we have an important role to play in promoting human rights among our stakeholders. Therefore respect for human rights is fundamental to our Company values and how we conduct our business activities.

This commitment is embedded in our corporate Human Rights Policy as well as our operational management processes. Our approach is guided by the United Nations Guiding Principles on Business and Human Rights and the Voluntary Principles on Security and Human Rights (VPSHR).

The Company's security practices are guided by the VPSHR which set out rules for engagement with the police that provide external security and response assistance, and provide guidelines on contractual requirements, the use of force and human rights training. All security personnel follow the VPSHR and have received human rights training and all security service providers are required to abide by the VPSHR code of conduct and they have to provide a quarterly certificate declaring that they (1) induct and train all new employees on these principles and (2) monitor the adherence to these principles by their employees.

OUR PERFORMANCE

We have a goal of zero human rights violations by our Company and our contractors. In 2019 we are pleased to report that we achieved that goal.

A comprehensive human rights impact assessment is embedded in our social impact management programs and our land acquisition and resettlement programs. These are documented in our Social Impact Assessments and Resettlement Action Plans as required by law.

We will continue to promote human rights within our sphere of influence. This is especially important in the context of our support for the United Nations Social Development Goals (SDGs), as human rights serve as the foundation of the overall SDG framework and underpin over 90% of the SDG targets. As such, the integration of SDGs will help promote a human rights-based approach to our business management.



RESETTLEMENT

OUR APPROACH

When the Company's activities involve land access and displacement, the Company establishes resettlement processes that adhere to international standards of fairness and transparency. As part of this process, in-depth consultations and negotiations are conducted with project affected people, under the leadership of experienced experts.

OUR PERFORMANCE

COBRE PANAMA

The resettlement plan for Cobre Panama 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. As of January 2017, all residents from Petaquilla community moved voluntarily to Nuevo Eden in accordance with the resettlement agreement. Resettled communities have adapted to their new communities and are now sustaining their livelihoods from their farming outputs. The community schools have been operating for just over five years under the Ministry of Education. This confirms the ongoing government support for, and participation in the new settlement, key to the long-term sustainability of these communities.

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: 82 have been resettled, 3 have received formal offers and 8 are having their homes monitored for damage and monitoring is ongoing.

93	82	8
Households participated	Households resettled	Monitored for damage

HAQUIRA

First Quantum has been engaging with communities influenced by the Haquira project in Peru since 2011. Through direct personal contact with families and local leaders, we have been working with the communities of Huanacopampa, Ccahuanhuire, Lahuani, Llamanhuire and Pararani to gather socio-economic data needed to commence resettlement negotiations. Community engagement continues to enable access for the ongoing environmental baseline data collection and environmental regulatory requirements for exploration permits.

TACA TACA

At Taca Taca in north-western Argentina, as part of an Environmental Impact Assessment, a communications plan has been designed and information meetings held with the populations closest to the project. The area is sparsely populated with no resettlement necessary for the advancement of the project. Local small populations are being briefed on the project to address their queries about potential employment and service provision.

SENTINEL

The resettlement of 624 families and 1 631 subsistence farmers is nearing completion at Sentinel in accordance with requirements set out in the Resettlement Action Plan approved by the Zambian Environmental Management Agency (ZEMA). All project affected people received their compensation on time prior to the mine's development. The resettlement included 24 036 formal stakeholder engagement meetings with local authorities, PAP and traditional leadership held between 2010 and 2018. First Quantum has secured title deeds for displaced farmers in conjunction with livelihood conservation farming restoration, specialized water upgrades and sanitation. Other socio-economic programs are being implemented and managed. Engagement with ZEMA is ongoing.

624	1 631	24 036
Families resettled	Subsistence farmers	Formal stakeholder meetings

KANSANSHI

In 2015, Kansanshi completed the Smelter Access Road resettlement program in accordance with the approved Resettlement Action Plan. The project impacted on 114 people. 50 formal meetings were held in 2015 with local stakeholders and traditional leaders and a livelihood restoration program, including casual employment and conservation farming, was fully implemented.

89	50
Received 100% of agreed compensation	Formal stakeholder meetings

BWANA MKUBWA

In 2019 we started a resettlement program affecting 25 people and 70 hectares. The Displaced Persons and Affected People asset surveys have been completed and together with the Ministry of Agriculture and the Ministry of Lands, First Quantum is currently finalizing entitlements and compensation packages which will secure land tenure and seek Zambia's Environmental Management Agency approval for the Resettlement Action Plan.

25	70
People to be resettled	Hectares affected



INDIGENOUS PEOPLES



GRI 411 **GRI 412** **OUR APPROACH**

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

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 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 free, prior and informed consent.

As part of 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.





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