POSITIONED FOR GROWTH

KAZ MINERALS
ANNUAL REPORT AND ACCOUNTS 2019

KAZ Minerals is a high growth copper company focused on large scale, low cost open pit mining in the CIS region, with a proven track record for the successful delivery of greenfield mining projects. The Group is listed in London and Kazakhstan.

OUR PURPOSE

Copper is fundamental to a sustainable future. KAZ Minerals develops and operates large scale, low cost copper mines.

Contents

DELIVERING *VALUE*

Financial highlights

Revenue
($ million)
+5%

19	2,266
18	2,162

EBITDA[1]
($ million)
+3%

19	1,355
18	1,310

Operating profit
($ million)
+8%

19	923
18	851

Profit before tax
($ million)
+13%

19	726
18	642

EPS – Basic
($)
+6%

19	1.21
18	1.14

EPS – Diluted
($)
+3%

19	1.17
18	1.14

Gross cash costs[1]
(USc/lb)
-3%

19	140
18	144

Net cash costs[1]
(USc/lb)
-9%

19	77
18	85

> "During 2019 KAZ Minerals continued to build on its operational track record, delivering further growth in copper production"
>
> **Andrew Southam**
> Chief Executive Officer

Production highlights

Copper production
(kt)
+6%

19	311
18	295

Gold production
(koz)
+10%

19	201
18	183

Mineral resources

Copper resources
(Mt)[2]
+49%

19	19.1
18	12.8

Gold resources
(Moz)[2]
+186%

19	18.0
18	6.3

Commodity prices

LME copper price
($/t)
-8%

19	6,000
18	6,526

LBMA gold price
($/oz)
+10%

19	1,393
18	1,268

1 Alternative Performance Measures ('APMs') are used throughout this report. APMs are used to assess the performance of the Group and are not defined or specified under IFRS. For further information on APMs, including justification for their use and reconciliation to closest equivalent IFRS measures, please refer to the APMs section on page 184.
2 Contained metal in measured and indicated mineral resources.

HIGH GROWTH

The demand for copper is growing, driven by economic development, urbanisation, renewable energy and electric vehicles.

KAZ Minerals is investing to meet this demand.

Global copper consumption forecast to rise 43% by 2040[1]

1 Source: Wood Mackenzie

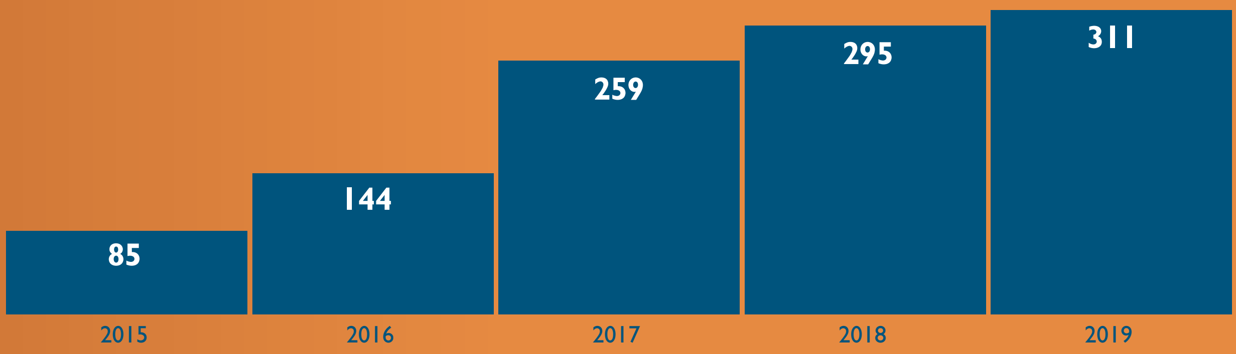
Major end use markets for copper today include power generation and transmission, construction, infrastructure, transport and consumer appliances. New demand is forecast from renewable energy generation and electric vehicles.

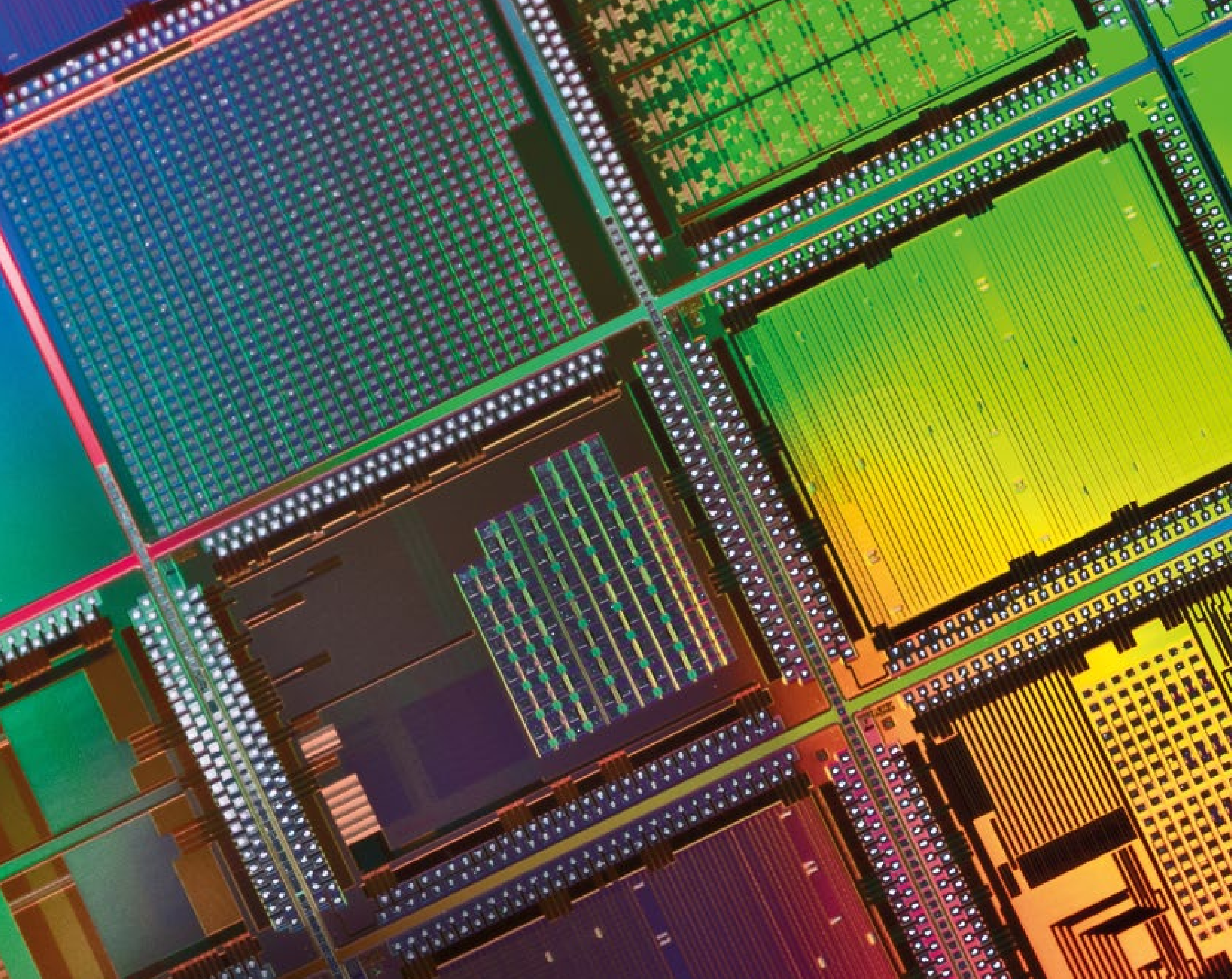
Since its formation in 2014, KAZ Minerals has been investing in the construction of large scale copper mining projects in the CIS region.

The Group's copper production has grown from 85 kt in 2015 to 311 kt in 2019, representing a CAGR of 40%.

The Group seeks to invest in value-accretive growth projects with low capital intensity and a high rate of return on investment.

Copper production (kt)

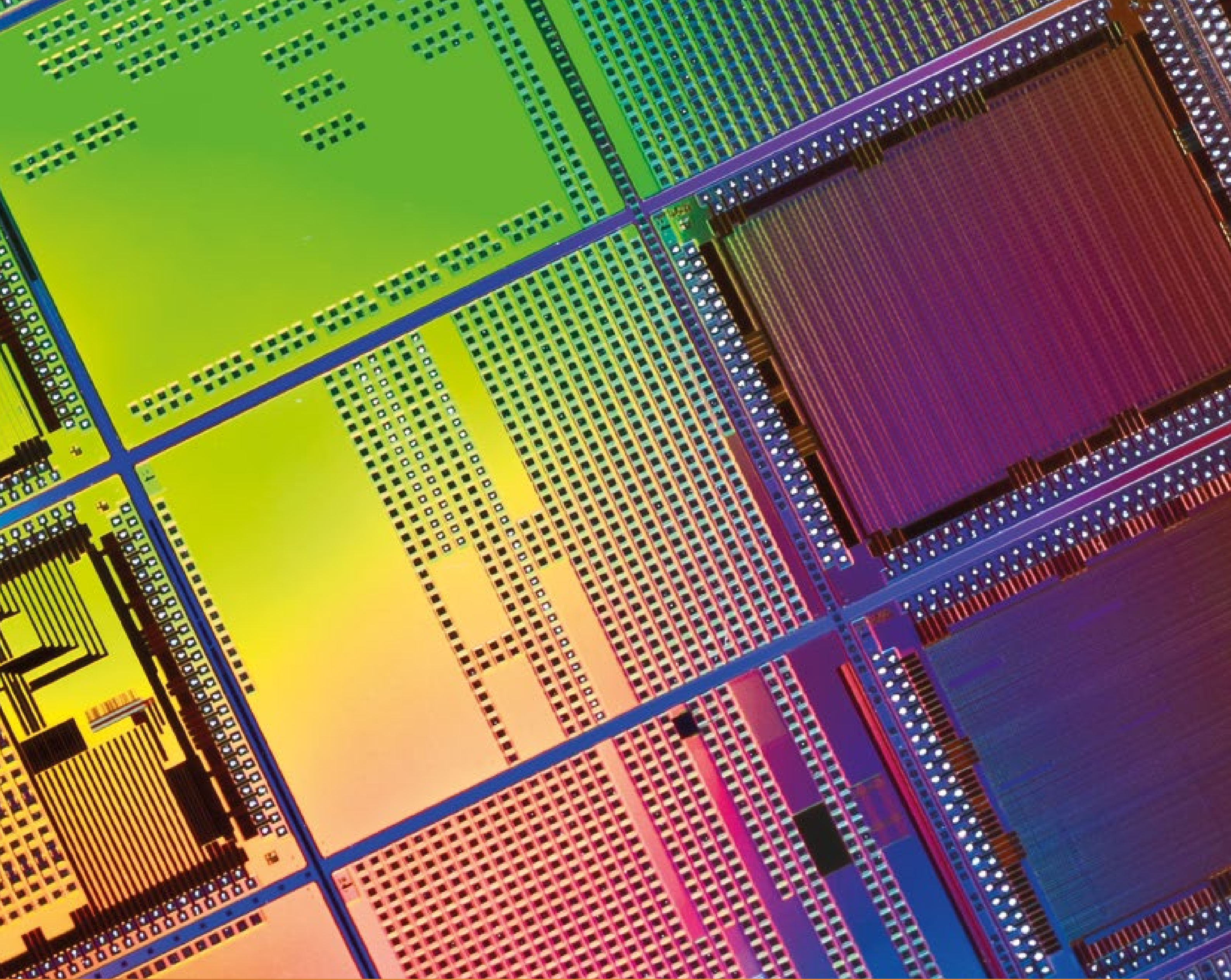




LOW COST

KAZ Minerals has applied modern technology to develop copper deposits and build a portfolio of highly profitable mines, with amongst the lowest operating costs in the world.

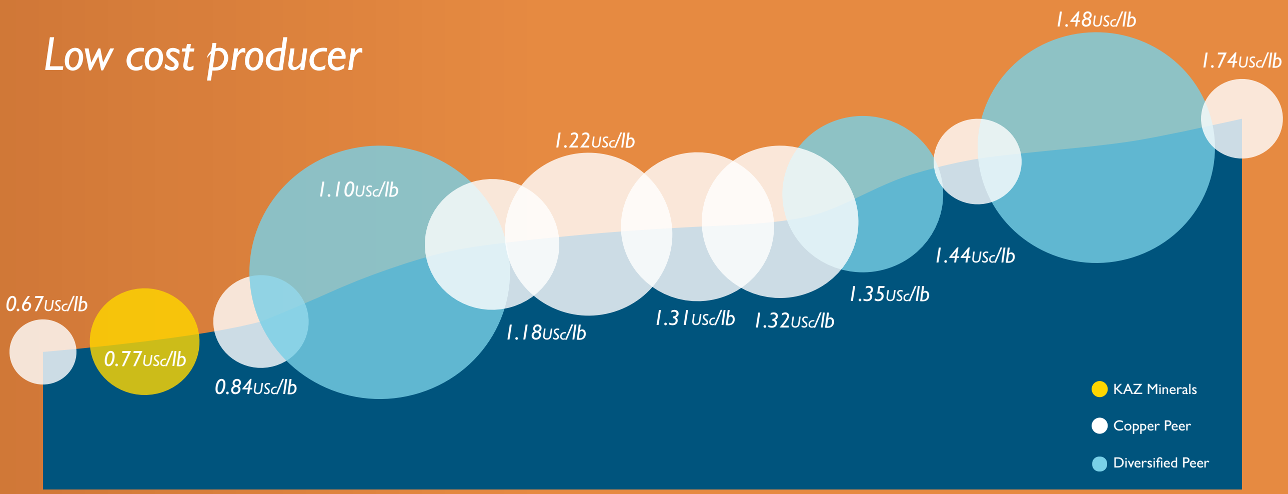
2019 Group net cash cost reduced to 77 USc/lb (2018: 85 USc/lb)



The low cost position of KAZ Minerals' copper mines is underpinned by structural factors including low power tariffs, low strip ratios, automation, the use of efficient, large scale processing technologies, access to rail networks and proximity to end markets.

The Group's mines also contain valuable by-products of gold, silver, and zinc. Revenues from these by-products contribute to the Group's industry-leading net cash cost position.

Low cost producer



Size of circle indicates annual copper production volumes.
Source for copper and diversified peers: Company data, most recently reported financial period.

LARGE SCALE

A total of 24 Mt of copper was supplied to global markets in 2019, with a total value of around $140 billion. A supply deficit of 4.4 Mt is forecast by 2029, unless new mining projects are brought into production[1].

The average grade of copper mined worldwide in 2017 was 0.9% compared to 1.3% in 2000

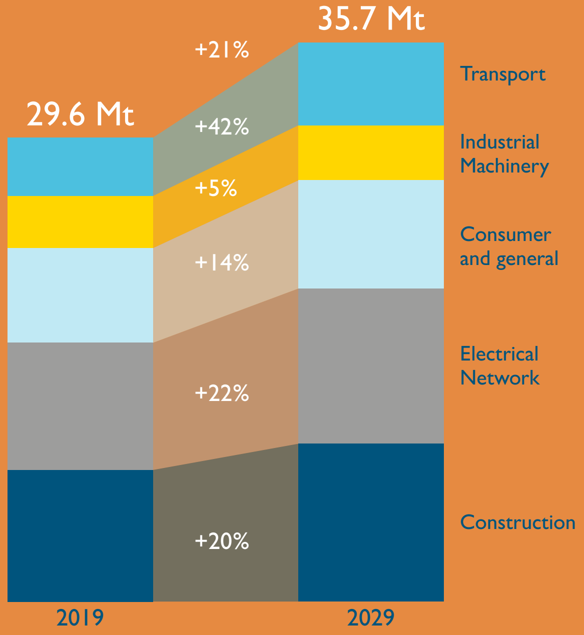
1 Source: Wood Mackenzie. Deficit forecast assumes delivery of 'probable' projects but not 'possible' projects, according to Wood Mackenzie classifications.

For the copper market to remain balanced and meet the forecast supply shortfall, new mining projects with a combined size equivalent to 16 times the Group's Baimskaya project in Russia would need to be approved, financed and constructed within the next seven years. As the average grade of ore bodies declines, new projects must mine and process increasing quantities of material to produce the same volume of copper.

KAZ Minerals is seeking to meet this challenge by developing and operating large scale, open pit copper mining projects.

The Group mined 95 Mt of ore in 2019. The processing equipment used at the Group's open pit sites is amongst the largest available in the industry. These large scale and efficient operations have enabled the Group to profitably grow its output by 6%, to 311 kt in 2019 (2018: 295 kt).

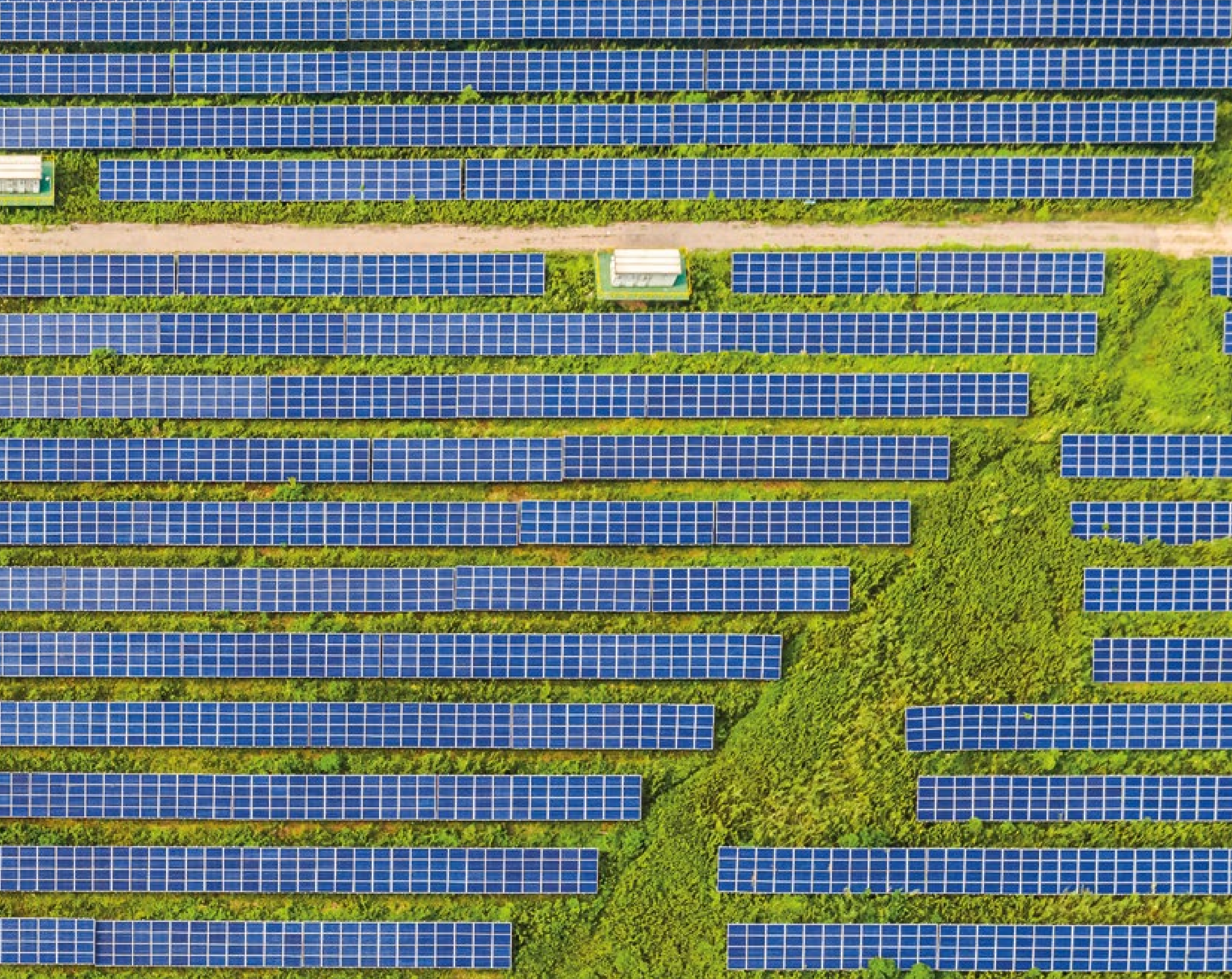
Copper demand by end use market[1]



Source: Wood Mackenzie, long-term outlook Q4 2019.
1 Includes consumption of scrap (2019: 6.1 Mt, 2029: 7.7 Mt).

LONG TERM

Investing in the development of copper mining projects, which take up to 7 years to build and may operate for decades, requires long-term planning and decision making.

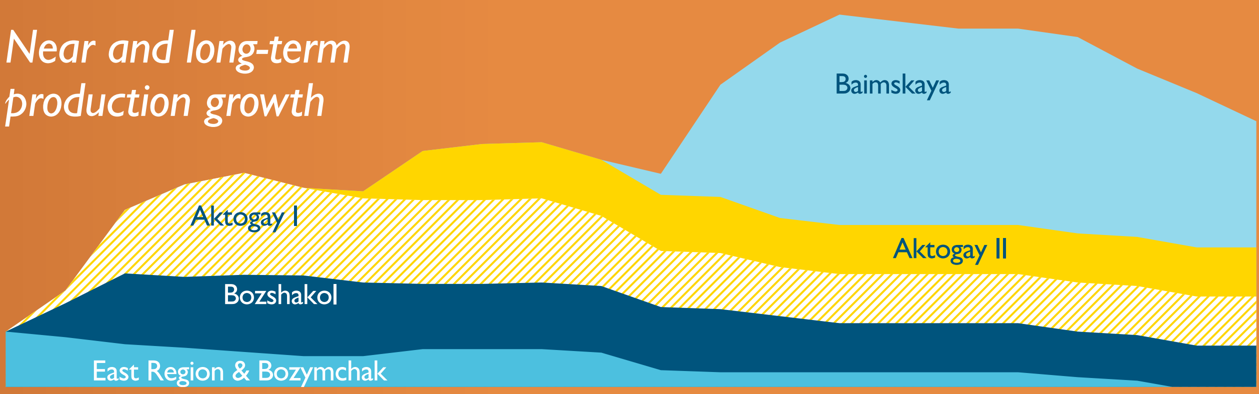


KAZ Minerals is focused on long-term value creation for the benefit of all stakeholders. The investments that are being made today will enable the Group to deliver high returns in the future.

The Aktogay II and Baimskaya copper projects are expected to have lower capital intensities than the Group's previous projects in Kazakhstan.

KAZ Minerals has established a pipeline of growth projects and has a proven track record for delivering similar projects successfully. Copper is fundamental to a sustainable future and the Group is ideally positioned to benefit from the long-term trends which will drive the demand and supply dynamics of the copper market in the next decade and beyond.

Near and long-term production growth



A PROVEN TRACK RECORD

...AND A PIPELINE OF GROWTH

AKTOGAY EXPANSION PROJECT

KAZ Minerals is currently investing in a $1.2 billion expansion project at Aktogay which will double sulphide processing capacity at the site by 2021, increasing copper production by around 80 ktpa over the period 2022-27.

	Low capital intensity ($/t[1])	Low operating costs (USc/lb[2])
Aktogay	17,700	100 – 120
Aktogay II	15,000	100 – 120
Bozshakol	17,200	70 – 90
Baimskaya	16,700	FIRST QUARTILE

1 Approximate capital expenditure per ktpa copper equivalent production calculated as capital expenditure divided by forecast annual copper equivalent production for the first 10 years after commissioning (2022-27 for Aktogay II). Baimskaya figure calculated based on $5.5 billion capital cost, subject to bankable feasibility study results.

2 Net cash cost guidance range in USc/lb for first 10 years of operations (2022-27 for Aktogay II), in 2016 terms. Baimskaya operating costs subject to bankable feasibility study results.

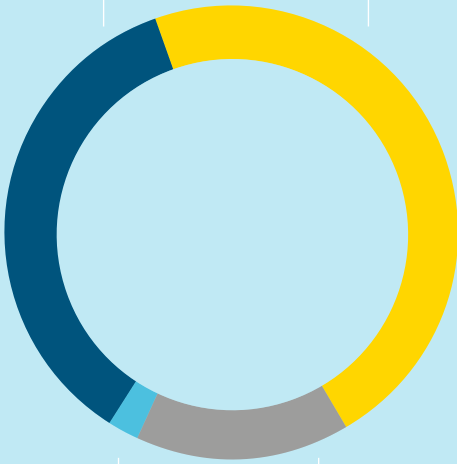
KAZ Minerals delivered further growth in copper production in 2019 and maintained its industry leading cost position. The Group's proven, low cost asset base provides a strong platform for investment into high-return copper growth projects.

Bozshakol

- Large scale open pit mine
- 992 Mt of mineral resources[4] with a copper grade of 0.36%
- Copper production of 110 kt in 2019
- Gold, silver and molybdenum by-products

Aktogay

- Large scale open pit mine
- 1,604 Mt of mineral resources[4] with a copper grade of 0.33%
- Copper production of 146 kt in 2019
- Expansion underway to double processing capacity by 2021



Bozymchak

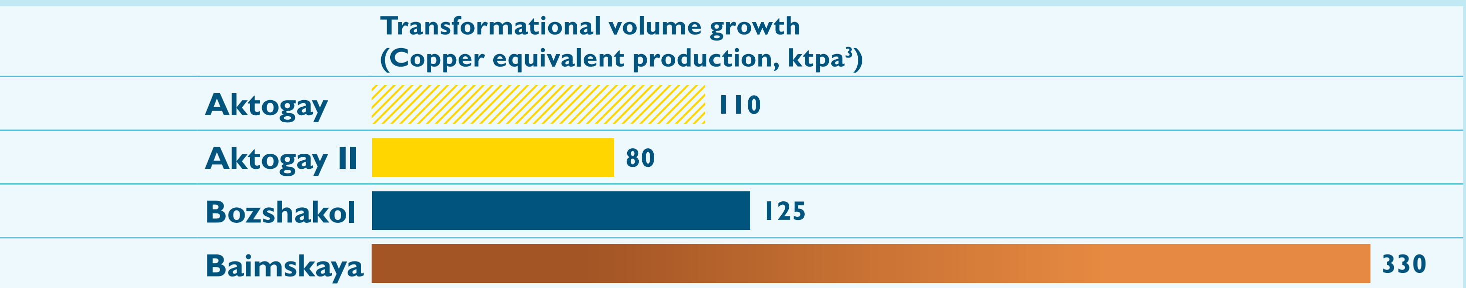
- Copper-gold open pit mine in Kyrgyzstan
- 14 Mt of mineral resources[4] with a copper grade of 0.78% and gold grade of 1.3 g/t
- Produced 7 kt copper and 41 koz gold in 2019
- Underground phase being developed

East Region

- Underground operations
- Three mines and associated concentrators
- 35 Mt of mineral resources[4] with a copper grade of 2.26%
- Copper production of 48 kt in 2019 with significant zinc, gold and silver by-products

BAIMSKAYA COPPER PROJECT

The Group acquired the Baimskaya copper project in the Chukotka region of Russia for $900 million in January 2019. Baimskaya is one of the world's most significant undeveloped copper assets, with the potential to become a large scale, low cost, open pit copper mine.



3 Copper equivalent production guidance for first 10 years of operations (2022-27 for Aktogay II). Total copper equivalent production units consisting of copper production, plus gold production converted into copper units assuming analyst consensus long-term price forecast of $6,700/t for copper and $1,300/oz for gold.
4 Measured and indicated mineral resources.

SUSTAINABLE LONG-TERM GROWTH

> The investments we make today at Aktogay and in the Baimskaya copper project will enable us to deliver higher returns in the future

Since its formation in 2014, KAZ Minerals has focused on the construction of large scale copper mining projects in the CIS region. We have successfully applied modern technology to develop copper deposits, building a portfolio of highly profitable mines with low operating costs.

Our decision to invest in copper growth projects is based on a positive long-term view of the copper market. Millions of tonnes of additional copper production are required to provide the world with the copper it needs to replace depletion of existing mines, to raise living standards in developing economies, to transition away from energy systems reliant on fossil fuels and to improve energy efficiency.

In 2019, the Group's operating assets in Kazakhstan performed well, with both Bozshakol and Aktogay delivering quarterly production records during the year. We also took steps towards establishing the next phase of growth for the Group, progressing the expansion project at our Aktogay mine in Kazakhstan and completing the acquisition of the Baimskaya copper project in Chukotka, Russia. The Aktogay expansion project will add to our existing world class asset base and provide a strong platform to support our investment in the Baimskaya project, which is one of the world's largest undeveloped copper deposits.

The acquisition of Baimskaya is aligned with our high growth, low cost strategy and the Group has a proven track record for the successful delivery of large scale mining projects. Baimskaya has the potential to approximately double the Group's copper production and triple gold output when it commences processing of ore from around 2026. The feasibility study for this project is progressing and the details are expected to be published later in the first half of 2020.

Copper and climate change

Focus on the issue of climate change has increased and investors and the wider public are demanding action from companies, governments and individuals. We recognise the significance that a transition to a lower carbon economy will have for the copper market and securing additional supplies of copper will be essential for facilitating a reduction in global CO_2 emissions. Renewable energy generation is many times more copper intensive than power generated from conventional energy sources. Additional supplies of copper will also be required to support the growing adoption of electric vehicles, which require more copper than internal combustion vehicles.

Our values and purpose

KAZ Minerals' corporate purpose is to invest sustainably in increasing its copper production. This has clear benefits for society due to the wide range of applications for copper in our everyday lives and the importance of copper for future energy and transportation technologies. Whilst growing our business, we seek to minimise the impact of our operations on the environment and we support national and local social projects which benefit host communities. We conduct our business in line with five corporate values which we use to guide our decision making: Safety, Long-Term Efficiency, Teamwork, Professional Development and Integrity. By adhering to these values we will be able to deliver sustainable growth which benefits all stakeholders.

Health and safety

It is with regret that I report two employee fatalities occurred at our operations during 2019, and one in January 2020. Any fatality is unacceptable to us and as a Group we have invested significant time, effort and funding to improve our safety performance. Whilst we have achieved a long-term reduction in the number and frequency of fatalities over the last few years, we will continue to devote our resources to eliminate fatalities and injuries at our operations.

Consultation and diversity

KAZ Minerals strongly believes in the benefits of regular consultation with its employees. Each year I host a 'Direct Line' forum to take questions from employees. Over the years we have made many improvements from acting upon feedback gained from these events, as well as through normal management reporting channels. Our Deputy Chair, Michael Lynch-Bell also meets with employee and labour union representatives and provides further feedback to the Board.

Our Purpose

Growth in copper for a sustainable future

Copper is fundamental to a sustainable future. It is at the heart of the global transition to renewable energy generation and low emission transport technologies such as electric vehicles. Copper is essential for modern infrastructure, construction and energy efficient consumer products. Copper is required to deliver higher living standards in developing economies and lower emissions worldwide.

KAZ Minerals develops and operates large scale, low cost copper mines.

As we grow our copper production, we seek to minimise the impact of our activities on the environment and communities. We aim to use an increasing proportion of carbon free energy and to improve the efficiency of our operations, to reduce emissions, waste and water consumption.

In the countries in which we operate, we support social projects targeted at education, healthcare, infrastructure, culture and sport. We make material tax contributions and fully disclose all payments to governments.

As we grow, we create employment and career development opportunities. We support local suppliers and we deliver a valuable product to our customers. We aim to generate value over the long term for our shareholders, whilst building a sustainable future for all the stakeholders in our business through growth in copper.

Our Values

Safety

Protect the health and wellbeing of all of our employees and contractors and protect the safety of the environment

Long-Term Efficiency

Anticipate the long-term consequences of today's actions

Teamwork

Take responsibility for personal and team goals, accept compromise, encourage colleagues and appreciate different perspectives

Professional development

Improve competency and skills, encourage education and training, share experience and knowledge with colleagues

Integrity

Uphold honesty in everything that we do. Keep promises and admit mistakes

KAZ Minerals has amongst the highest female representation in its workforce of any of its mining peer group, at 22%. This level of female representation is consistent across all levels of employees and management. Excluding roles which are restricted by law in Kazakhstan from being carried out by female workers, the proportion of female workers is 39%.

Our workforce benefits from a broad diversity of nationalities and ethnic backgrounds. In Kazakhstan and Kyrgyzstan we prioritise recruitment and training for local workers and around 98% of our employees are nationals of those countries. Our expatriate employees bring mining experience to the Group from all over the world.

Dividends

The Group's dividend policy, established at the time of Listing, is for the Board to consider the cash generation and financing requirements of the business before recommending a suitable dividend. This maintains flexibility, which is appropriate given the underlying cyclicality of a commodity business and the Group's growth ambitions.

The Group's largest assets in Kazakhstan, Aktogay and Bozshakol, are highly cash generative and have contributed to further growth in production and earnings in the year. The Group has also continued to invest in its growth pipeline, with $436 million paid in respect of the Baimskaya acquisition and $111 million incurred on feasibility study and pioneer works. Further capital investments of $607 million were made, mainly in the Aktogay expansion project.

Taking into account the performance of the Group's producing assets in 2019 and the outlook for 2020, the Board has recommended a final dividend of 8 US cents per share. Combined with the interim dividend of 4.0 US cents per share, the dividend in respect of the 2019 financial year is 12 US cents per share.

The future financing requirements of the Baimskaya project will be announced with the results of the bankable feasibility study, following which the Board will further review the Group's allocation of capital.

Board changes

After nearly nine years as a Director, Charles Watson will retire from the Board during 2020. We are very grateful for Charles' contribution over his time with us, which has been a period of significant change for the Group. Further details of Charles' departure will be announced at the appropriate time.

Performance and prospects

At KAZ Minerals, we have demonstrated our ability to make long-term investment decisions: to construct and operate large scale greenfield copper projects which are today generating significant cash flows and are amongst the lowest cost copper mining assets globally.

We will continue to focus on long-term value creation for the benefit of all stakeholders. The investments we make today at Aktogay and Baimskaya will enable us to deliver higher returns in the future. There are few comparable companies with a similar recent history of success in construction, a growth pipeline of world class projects and a proven producing asset base, consisting exclusively of low cost copper mines. KAZ Minerals has built a strong track record of achievement to date and I look forward to continued success in the years to come.

Oleg Novachuk
Chair

CREATING VALUE

KEY INPUTS

Access to the key inputs required for the mining and processing of copper is the source of our competitive advantage and enables us to generate value for our stakeholders.

Natural resources

We have access to 4,659 Mt of measured and indicated mineral resources at our mining assets, with an average copper grade of 0.41%. The ore also contains by-products of gold, silver and zinc.

Power

Our operations in Kazakhstan benefit from competitive power tariffs and a domestic power surplus, enabling us to operate large scale facilities at low cost.

Water

We have access to readily available fresh water from groundwater and surface water sources. Our modern processing facilities recycle a high proportion of water consumed.

Transport

Our operations are connected to existing national rail networks which enable us to efficiently deliver our products to customers in China and Europe.

Labour

We employ approximately 16,000 people in our business. There is a skilled mining workforce in Kazakhstan.

Finance

KAZ Minerals raised $700 million of new debt facilities in 2019 and increased its PXF facility by $700 million in January 2020.

Low cost operations

The Group's net cash cost in 2019 of 77 USc/lb was amongst the lowest of any pure-play listed copper miner.

DEVELOPMENT

The Group seeks to develop natural resources, focusing on copper assets located in Kazakhstan and the CIS region.

0.41%

Average grade of copper in ore in mineral resources

4,659 Mt

Mineral resources (measured and indicated)

PRODUCTION

The Group operates six copper concentrators with a total sulphide ore processing capacity of c.60 Mtpa. 19 Mt of oxide ore was also placed on heap leach cells in 2019.

HOW WE RUN OUR BUSINESS

Health and safety

Safety is our highest priority. Our target is zero fatalities and a reduction in the rate of injuries (TRIFR) at our operations.

Environment

We seek to minimise the impact of our activities on the environment. We report all material impacts in our Sustainability report, see pages 50 to 65 for details.

Local communities

KAZ Minerals is a responsible operator and we seek to share the benefits of the development of natural resources with local communities.

SALES

VALUE CREATION

95 Mt

Ore mined in 2019

0.60%

Copper grade of sulphide ore processed in 2019 (2018: 0.63%)

The majority of the Group's copper concentrate is supplied to smelter customers in China.

Zinc concentrate from the East Region is sold to customers in Kazakhstan, China and the CIS.

Treatment and refining

East Region and Bozymchak copper concentrate (and some material from Aktogay and Bozshakol) is toll processed into cathode in Kazakhstan at the Balkhash smelter.

Sale of finished metals

The Group sells finished metals from the Balkhash smelter and copper cathode produced from oxide ore at Aktogay.

Employees

KAZ Minerals respects the right to freedom of association and we regularly consult with our employees and trade unions representing them.

Risk management

We closely monitor the risks associated with our activities.
Please see pages 68 to 72 for a detailed analysis of the key risks to our business.

Corporate governance

KAZ Minerals adheres to the highest standards of corporate governance.

Shareholders

We seek to maximise value for our shareholders over the long-term by investing in the construction of large scale, low cost copper mines with long mine lives that will generate value through the commodity cycle.

Customers

Our customers in China and Europe rely on our supplies of metal and concentrate. The copper we produce is used to construct power and transport infrastructure and housing, generate clean energy and in the manufacturing of consumer goods.

Suppliers

We prioritise local content where possible and require suppliers to meet our codes of conduct. Our Suppliers' Charter sets out the standards that we require of our suppliers. (see page 62 for further details).

Communities

We create jobs and business opportunities for local communities. We support local and national social projects. We engage with communities close to our operations and any proposed new development project to minimise harm and to share in the benefits of natural resource extraction (see page 63 for further details).

Our people

We invest in our people, helping them to further their careers. Professional development is one of our core corporate values (see page 59 for further details). We are committed to offering equality of opportunity to all, regardless of gender. 22% of our employees are female compared with an average of 17% for peers.

Kazakhstan

We are a major economic contributor to Kazakhstan. Our tax contributions support the Government in providing public services and infrastructure. The Group funds social projects at local and national level.

CLOSER RELATIONSHIPS

Stakeholder interests are key to the long-term sustainable success of the Company. The Board and the Group's stakeholders engage with each other on a continuous basis, enriching the Board's awareness and understanding of a diversity of interests and perspectives, shaping the Group's strategy.

Key stakeholders	Why we engage
Shareholders	Shareholder equity in the Company and the benefits of being a premium listed company enable us to deliver the Group's strategy. We create value for shareholders, whilst mindful of our purpose, values and wider responsibilities. As owners of our business, shareholders need to understand our strategy and performance as well as how we apply corporate governance and risk management processes and sustainability initiatives. We encourage them to communicate their views on the business and our strategy and we consider these in our decision making.
Customers	Customers provide the revenue our business requires; our product sustains their businesses. The Board gains an understanding of customer sentiment and customers receive clear information on the Company they are transacting with.
Suppliers	Our suppliers provide us with the materials and services required to build and operate our assets. By engaging with each other we gain mutual assurance of each other's standards of business conduct, including that there are appropriate corporate governance standards and values in place with our business partners. We gain assurance on the quality of product in our operations and that services are carried out in line with our standards and policies, including health and safety and human rights.

Section 172 Statement

The Board leads the business in accordance with our corporate purpose of "growth in copper for a sustainable future" and we believe that this purpose serves all our stakeholders. The following disclosure describes how the Directors have had regard to the matters set out in section 172(1)(a) to (f) when performing their duties and forms the Directors' statement required under section 414CZA of the Companies Act 2006.

Read more about our stakeholder engagement on pages 59 to 65 and 86 to 87

Read more about how we manage risks on pages 66 to 72

Read more about the environment on pages 53 to 58

Read more about governance on pages 74 to 87

How the Board engages

- The Head of Investor Relations, Chief Financial Officer, Chief Executive Officer and Chair are available to meet institutional investors around the world in relevant geographies
- The Company's brokers presented to the Board during the year on investor sentiment
- The Company Secretary, Chair of the Remuneration Committee and Deputy Chair engage with institutional investors and proxy advisors when required on governance matters
- Equity analysts, who provide research to investors, meet management at results presentations where they also have the opportunity to ask questions. These meetings are open to investors to watch via the website. We also maintain a dialogue with equity analysts during the year and following major announcements
- Shareholders have the opportunity to meet all Directors at the Annual General Meeting
- The website, Annual Report and Accounts, stock exchange announcements and press releases keep investors informed of our strategic progress, operational performance, our governance structure and other news

- The directors of the UK Sales operations maintain ongoing relationships with customers over the year. Reports are presented to the Board on customers, the sales strategy and market conditions

- The General Directors, Projects Director and the Group Procurement Director and team have an ongoing dialogue, carry out due diligence and regularly meet with suppliers. They report to the Executive Committee and also present reports directly to the Board and its Committees during the year

Key stakeholders	Why we engage
Local communities	Local communities support our operations providing the infrastructure, suppliers and the workforce required for our business. We provide them with employment, we pay taxes and provide social investment to help improve their environment. We communicate regularly with local communities to explain our plans and to understand their priorities and concerns.
Employees and the wider workforce	Our workforce is a prized asset and determines our ability to operate successfully. The Board needs to understand the views of our employees, as they form an important part of our considerations when making decisions. Engagement with the workforce helps us to improve the lives of our employees and make KAZ Minerals a better place to work. It enables the Board to assess the Group's culture and employee understanding of our values and training, so that we learn what motivates them and can address any gaps. Staff are regularly trained especially in health and safety and other Group policies in line with our corporate values and we check that wages are aligned with inflation in living costs, particularly for lower paid employees and that all staff are paid above the living wage in Kazakhstan.
Governments	Governments permit us to operate and develop our projects by providing the necessary licences and support for our infrastructure. We pay taxes, create employment, support local suppliers, provide training and invest in social spend.
Lenders	Banks and other lenders provide finance to support our growth and help us to maintain an efficient capital structure. They benefit from partnering with a responsible and sustainable company.

How the Board engages

- Major consultations are undertaken during construction projects
- The Chair and Chief Executive Officer regularly update the Board on local issues which affect business decisions
- Public meetings are regularly held by our operations with the local community
- We aim to employ local populations in our operations and we provide sponsorship for local schools and colleges including scholarships and training programmes with the aim of the employment of a skilled local workforce for our business
- The Group provides social investment in the areas of healthcare, education, infrastructure, culture and sport
- Non-executive Directors including the Deputy Chair have visited and reported back to the Board on several of the Group's social projects

- Directors, including independent non-executive Directors, visit our site based operations twice a year and engage with staff at all levels on health and safety, construction, operations and personal welfare of staff
- The Designated non-executive Director for the workforce (our Deputy Chair), undertakes site visits and meets groups of employees and trade union and collective committee representatives to gather feedback and to understand the views of the workforce, which he conveys to the Board
- General Directors hold quarterly meetings with their staff on site
- Trade union representatives provide feedback to General Directors and the Group HR Director and this is reported to the Executive Committee which is attended by the Chair and Chief Executive Officer
- The Nomination Committee oversees the development of a pipeline for succession, the Leadership Development Programme and diversity statistics and initiatives
- The 'Direct Line' to the Chair allows employees at all levels of seniority from across the Group to engage directly with the Chair
- HR and Corporate Communications engage with staff and report into the Executive Committee on employee sentiment
- We have a corporate newsletter and use various social media channels to communicate news to employees and we organise corporate competitions in areas such as corporate values
- The Remuneration Committee has oversight of workforce pay and policies
- There is a Speak Up facility in the event that employees wish to raise any issues confidentially, with calls received reported to the Audit Committee together with the results of investigations

- Meetings are held between the Group and local and national governments throughout the year on a range of issues
- The Board receives updates from the Chair as well as Vladimir Kim and from third parties, on overseas government sentiment and the political climate
- The Audit Committee receives regular updates on changes to taxation

- The Group Treasurer, Chief Financial Officer and Chief Executive Officer meet with lenders regularly to update them on our operations and to discuss existing or future financing requirements. The Board receives updates on financial markets, reviews the Group's liquidity and financing requirements and approves the financing strategy

DELIVERING GROWTH AND VALUE

"In 2019 KAZ Minerals continued to build on its operational track record, delivering further growth in copper production and maintaining its industry leading cost position"

Delivering growth and value

During 2019 KAZ Minerals continued to build on its operational track record, delivering further growth in copper production and maintaining its industry leading cost position. The Group's large scale assets in Kazakhstan achieved record levels of copper and gold production, helping the Group to deliver the highest revenues and EBITDA since the creation of KAZ Minerals in 2014. Our proven, low cost asset base provides a strong platform for investment into high-return brownfield and greenfield copper projects. In the near term, production growth is expected from the Aktogay expansion project starting in 2021, whilst the Baimskaya deposit in Chukotka, Russia, offers longer term growth potential and is currently at feasibility study stage.

Health and safety

We place the highest priority on improving our health and safety performance. I am saddened to report that there were two fatalities in our underground mines in the East Region of Kazakhstan during the year and one in January 2020. We believe that all fatalities are avoidable and we will continue to implement the necessary cultural and procedural changes to achieve this outcome. The open pit mines at Aktogay, Bozshakol and Bozymchak have all operated without any fatal incidents since they commenced production. The number of fatalities in the Group's operations has been on a long term downward trend following targeted investments and initiatives to improve performance in this critical area over several years.

Injury rates reduced in 2019, with the Group recording a TRIFR of 1.38 (2018: 1.74). During the year we launched a new flagship health and safety programme entitled 'Goal Zero'. The programme seeks to unite employees, contractors, supervisors, management and the Board, behind the common aim of reducing health, safety and environmental incidents to zero.

Our people

I would like to thank all of my colleagues for their contribution to KAZ Minerals' performance in 2019. We continue to invest in the training of our workforce in Kazakhstan and our modern, large scale assets provide exciting professional development opportunities. Around 250 local recruits started their apprenticeships at purpose-built facilities at Aktogay during the year and we are proud to be transferring skills to the next generation of miners. The construction of the expansion project at Aktogay will generate further employment and career development opportunities in the future. KAZ Minerals has one of the highest levels of female representation in its workforce amongst its mining peers and we are seeking to increase gender diversity through equality of opportunity.

Review of operations

The main sulphide concentrators at both Aktogay and Bozshakol operated at design ore throughput capacity over the year. Following upgrade works in the first half, the Bozshakol clay plant processed over 3 Mt of ore in the second half of the year, which on an annualised basis exceeded the plant's design capacity throughput of 5 Mtpa.

Group copper production of 311 kt (2018: 295 kt) exceeded guidance of c.300 kt due to a strong performance from Aktogay, where a high average sulphide copper grade of 0.58% and good recovery rates were the main drivers of copper production of 146 kt in 2019. Group gold production of 201 koz (2018: 183 koz) also exceeded guidance set at the start of the year of 170-185 koz, as indicated in the third quarter production report, mainly due to outperformance at Bozshakol and the Bozymchak mine in Kyrgyzstan. Silver production of 3,382 koz was 13% ahead of guidance whilst zinc in concentrate output decreased to 38 kt, slightly below revised guidance of 40-45 kt, due to challenging geological conditions at the two largest mines in the East Region.

Production guidance

With all of the Group's concentrators now fully ramped up and operating at design capacity, future output levels will primarily be determined by average grades and recovery rates, until the start-up of the new concentrator at Aktogay in 2021. Copper production for the Group in 2020 is expected to be 280-300 kt. Aktogay copper production is set at 120-130 kt (2019: 146 kt), as grades will decline from their previously elevated levels, whilst higher average copper grades at Bozshakol are expected to result in copper production increasing to 110-120 kt in 2020 (2019: 110 kt). In the East Region and Bozymchak, copper production is guided to reduce to around 50 kt (2019: 55 kt) as grades and processing volumes remain low at Artemyevsky, during the transition to the second ore body, and as mining takes place at deeper horizons and in more challenging geological conditions at Orlovsky. Gold production guidance is set at 180-200 koz as Bozshakol maintains the high output levels achieved in 2019 but grades decline at Bozymchak, in line with the mine plan. Silver and zinc in concentrate production are expected to remain broadly in line with 2019, at c.3,000 koz and c.40 kt, respectively.

Growth projects

Baimskaya

KAZ Minerals completed the acquisition of the Baimskaya copper project in January 2019. The licence area contains the Peschanka deposit, one of the world's most significant undeveloped copper assets with JORC resources of 9.5 Mt of copper at an average grade of 0.43% and 16.5 Moz of gold at an average grade of 0.23 g/t.

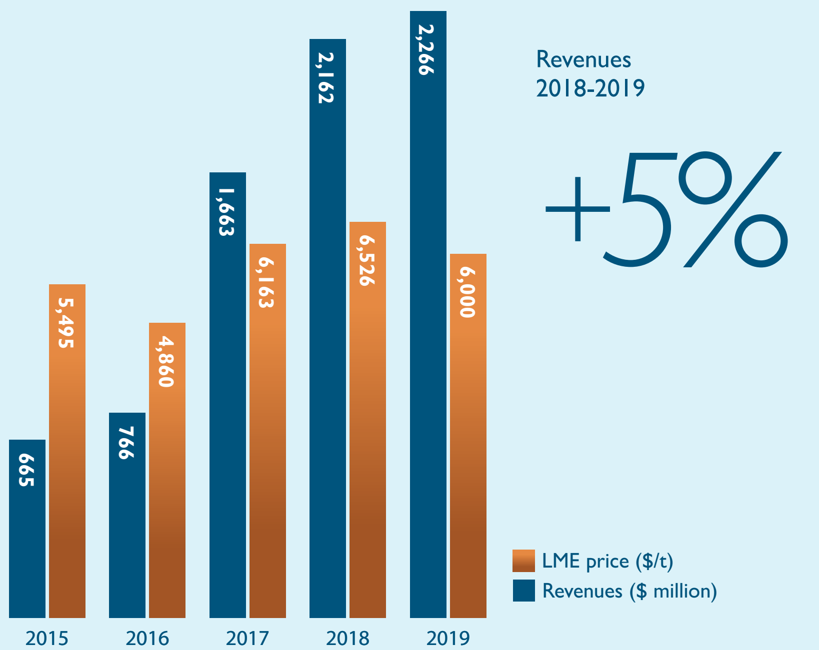
The Group is currently progressing a bankable feasibility study of the Baimskaya project and the results of the study are expected later in the first half of 2020.

The Board approved $80 million of capital expenditure in 2019 for pioneer works on the camp, fuel storage, airfield and site power infrastructure and for the delivery of construction equipment. The pioneer works and deliveries proceeded according to schedule. Total capital expenditure during 2019 on the feasibility study and pioneer works was $111 million.

Aktogay expansion

The Group's expansion project at Aktogay progressed well during 2019, with the main areas of the concentrator building fully enclosed and mill installation underway. The Group took delivery of the first of its new fleet of larger mining vehicles during the year, which contributed to a 32% increase in ore extraction at Aktogay to 55,134 kt (2018: 41,911 kt), as mine development works were undertaken prior to the start

Revenues and average annual copper price 2015-2019



of processing at the new concentrator. The project's $1.2 billion budget and timetable are both unchanged with the new concentrator expected to commence operations in 2021.

Koksay

NFC's investment of $70 million for the development of Koksay and its acquisition of a 19.4% stake in the project was completed on 3 July 2019. A feasibility study has commenced, the results of which will be reviewed by the Board before assessing how and when to proceed with the project. Expenditure on study work and drilling during 2019 was $5 million.

Financial performance

Revenues increased to $2,266 million (2018: $2,162 million), despite lower average copper prices during the year, due to the strong production performance with copper and gold sales respectively 7% and 33% higher than 2018. Copper sales of 317 kt (2018: 296 kt) exceeded copper production of 311 kt (2018: 295 kt) due to the sale of finished goods inventory. The average LME copper price in 2019 was $6,000/t, 8% below the average for 2018 of $6,526/t.

The Group maintained its competitive position on the industry cost curve and recorded EBITDA of $1,355 million (2018: $1,310 million), representing an EBITDA margin of 60% (2018: 61%). Operating profit increased by 8% to $923 million (2018: $851 million), representing an operating margin of 41% (2018: 39%). Free Cash Flow reduced by 30% to $411 million (2018: $585 million) and cash flow from operations was $512 million (2018: $673 million).

Unit costs

Higher production volumes from Aktogay and Bozshakol, a weaker tenge to US dollar exchange rate and successful cost reduction initiatives undertaken in the East Region resulted in a Group gross cash cost of 140 USc/lb (2018: 144 USc/lb) and an industry leading net cash cost of 77 USc/lb (2018: 85 USc/lb). KAZ Minerals continues to deliver amongst the lowest unit costs of any pure play copper producer, or copper division of a major diversified miner.

The gross cash cost at Aktogay reduced to 102 USc/lb (2018: 106 USc/lb) with a net cash cost of 98 USc/lb (2018: 103 USc/lb). The reduction in unit costs was mainly driven by higher copper production volumes, which increased by 11% to 146 kt, from 131 kt in 2018.

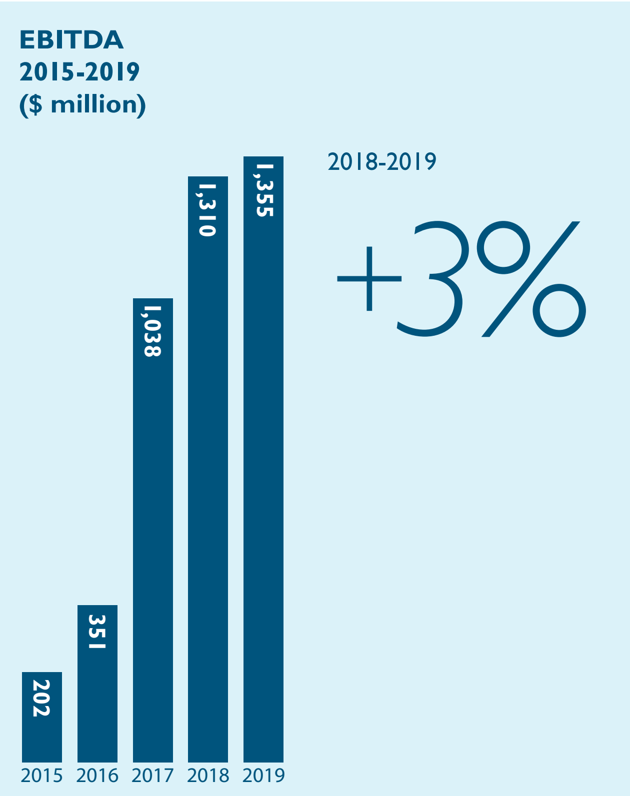
Bozshakol's gross cash cost increased to 137 USc/lb (2018: 129 USc/lb), mainly due to the sale of 26 koz of gold bar inventory in the first half of 2019 that was brought forward from 2018 to the National Bank of Kazakhstan. The production costs associated with the sale of this material increased gross cash costs by around 5 USc/lb to 137 USc/lb (2018: 129 USc/lb) and benefited net cash costs by 9 USc/lb, contributing to a highly competitive net cash cost for Bozshakol of 31 USc/lb (2018: 58 USc/lb).

In the East Region and Bozymchak, gross cash costs decreased to 234 USc/lb (2018: 244 USc/lb), as the weaker tenge exchange rate and management-led cost reduction measures, including the rationalisation of shift schedules and transportation routes, more than offset lower production volumes and local market inflation in the price of raw materials and labour. The net cash cost in the East Region and Bozymchak increased to 104 USc/lb from 94 USc/lb in 2018, as the reduction in gross cash cost was offset by lower zinc output.

Balance sheet

Net debt increased to $2,759 million (2018: $1,986 million) as the Group invested in the acquisition and development of its copper growth project pipeline. The Baimskaya licence area in Russia was acquired in January 2019, with the $436 million cash component of the consideration paid during the first half. Expansionary capital expenditure of $718 million was invested during 2019, mainly at Aktogay.

The Group made a total of $545 million of scheduled debt repayments and drew $387 million from new facilities during the year, resulting in gross borrowings of $3,300 million at 31 December 2019 (31 December 2018: $3,453 million). New debt facilities were signed with the Development Bank of Kazakhstan for $600 million in June 2019 and Caterpillar Financial Services Corporation for $100 million in November 2019. Combined with the recent $1.0 billion PXF refinancing announced on 28 January 2020, the Group has raised a total of $1.7 billion of debt facilities over the last nine months to replace amortising facilities and provide additional flexibility.



Financial guidance

At Aktogay, gross cash cost guidance for 2020 is set at 110-130 USc/lb, higher than the 102 USc/lb recorded in 2019, as copper output is guided to reduce to 120-130 kt from 146 kt in the prior year. At Bozshakol, grades and copper production volumes are forecast to increase, offsetting general inflation in local wages and energy prices. Gross cash cost guidance is maintained at 130-150 USc/lb, in line with the range set at the beginning of 2019. At the East Region and Bozymchak, 2020 gross cash costs are expected to be between 260 and 280 USc/lb (2019: 234 USc/lb) as sales volumes fall from 62 kt in 2019 to approximately 50 kt, in line with production guidance.

Sustaining capital expenditure at Bozshakol and Aktogay is expected to increase to $60 million for each mine, including construction works relating to tailings capacity. Sustaining capital expenditure of $50 million is expected in the East Region and Bozymchak in 2020.

Excluding the Baimskaya copper project, expansionary capital expenditure in 2020 is expected to be around $495 million. This comprises $400 million on the Aktogay expansion project, $60 million on ongoing mine development works at Artemyevsky in the East Region, $15 million to commence development of the underground phase at Bozymchak and $20 million on Koksay project studies and other smaller items.

Capital expenditure of $150 million has been approved at Baimskaya in 2020 to complete the bankable feasibility study and continue pioneer works. The Group is evaluating whether to make additional equipment deliveries to Pevek in the 2020 shipping window and may consider approving additional capital expenditure later in the year.

Outlook

As hopes for an improvement in international trade relations increased in the fourth quarter, the price of copper recovered from its lows in 2019 but was impacted in January 2020 by an outbreak of the Covid-19 coronavirus. In the short-term, the impact of infection control measures taken in China against the virus and news of progress on trade negotiations are likely to be key drivers of the copper market.

The Group maintains its positive view on the medium to long-term outlook for copper, as declining supply from existing mines will need to be replaced by output from new projects in progressively more difficult locations and with lower average copper grades. A material deficit in the copper market is forecast by many analysts to emerge over this decade, to coincide with the ramp up of output from the Group's new copper growth projects at Aktogay and Baimskaya.

KAZ Minerals continues to offer an attractive combination to investors of growing output from its world class producing assets, together with amongst the lowest unit cost position of any pure play copper company globally. We have a strong platform from which to continue our track record of successful investment in copper growth projects.

Andrew Southam
Chief Executive Officer

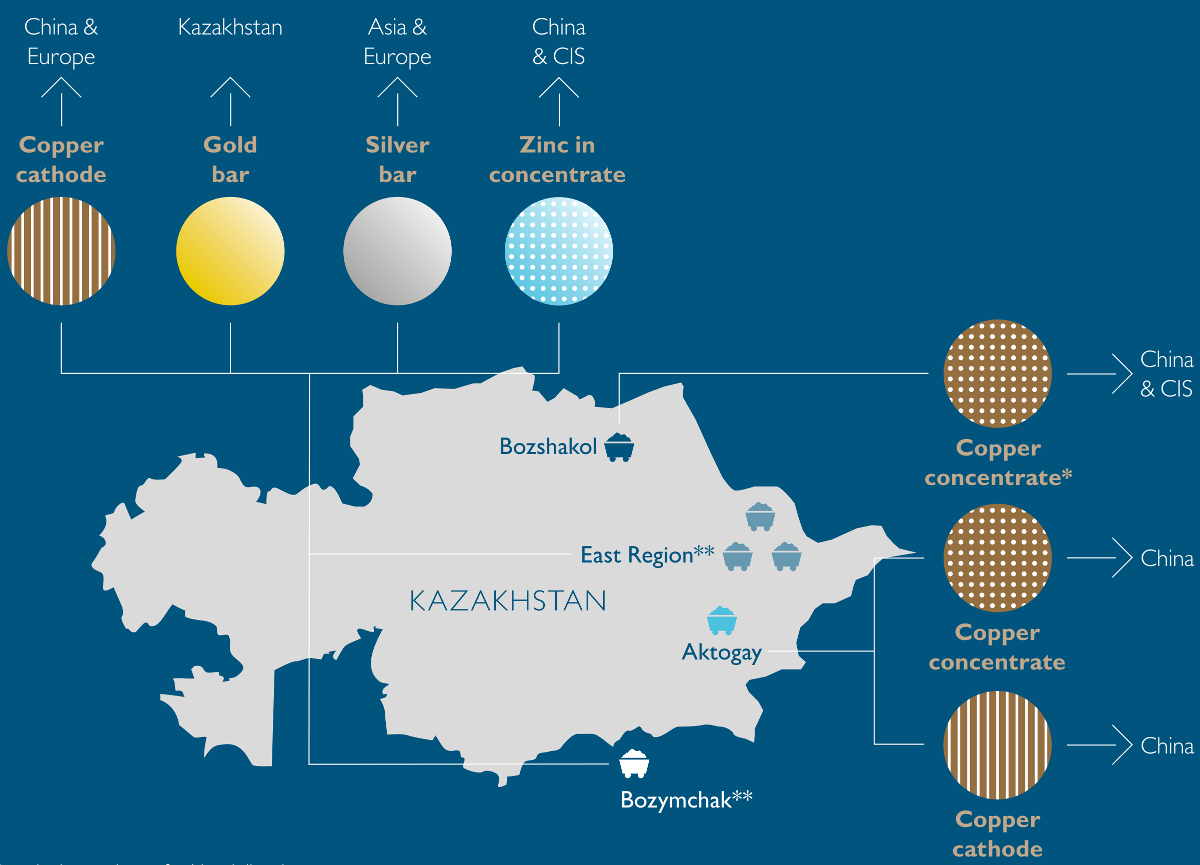
DELIVERING ON OUR STRATEGY

Strategic priority			Relevant KPIs
1	*Deliver major growth projects*	We seek to undertake growth projects which have the potential to deliver a high return on investment, including expansions of existing assets and new development projects.	• EBITDA • Ore processed • Net cash cost of copper • Copper production • Maintenance spend per tonne of copper produced • Number of fatalities • Total Recordable Injury Frequency Rate
2	*Optimise existing assets*	Improve health and safety, increase productivity and maintain low operating costs and sustaining capital expenditure.	• EBITDA • Ore processed • Net cash cost of copper • Copper production • Maintenance spend per tonne of copper produced • Number of fatalities • Total Recordable Injury Frequency Rate
3	*Take advantage of natural resource opportunities*	Seek out natural resource opportunities, focusing on copper assets in Kazakhstan and the CIS region.	• EBITDA • Ore processed • Net cash cost of copper • Copper production
4	*Be a socially responsible operator*	KAZ Minerals is committed to maintaining high levels of corporate responsibility as we grow our business and share the benefits of natural resource extraction with our key stakeholders.	• Number of fatalities • Total Recordable Injury Frequency Rate • CO_2 emissions per unit of sulphide ore processed • Water consumption per unit of sulphide ore processed • Social investment spending

The Group's strategy is reviewed and updated by the Board regularly. The success of the strategy is measured using relevant KPIs and risks are controlled through the risk management framework.

Stated priorities for 2019	2019 performance	2020 goals
Aktogay expansion • Keep construction of new $1.2 billion expansion project on budget and on schedule	**Aktogay expansion** • Project has progressed well in 2019 and remains on schedule and within budget • TRIFR 1.26 • Zero fatalities	**Aktogay expansion** • Progress construction according to schedule, first production to commence in 2021 • Remain within $1.2 billion project budget • Maintain high health and safety standards
All assets • Improve health and safety performance • Seek operational and cost efficiencies • Maintain competitive net cash cost position **Aktogay** • Operate first sulphide concentrator at design capacity **Bozshakol** • Operate at design capacity **East Region and Bozymchak** • Achieve production and cost targets	**All assets** • Two fatalities • TRIFR 1.38 (2018: 1.74) • Net cash cost 77 USc/lb (2018: 85 USc/lb) **Aktogay and Bozshakol** • Main sulphide concentrators achieved design capacity of 25 Mtpa **East Region and Bozymchak** • Met or exceeded copper, gold and silver production targets • Cost guidance reduced by 30 USc/lb • Belousovksy concentrator closed, ore redirected to Nikolayevsky	**All assets** • Improve health and safety performance • Seek operational and cost efficiencies • Maintain competitive net cash cost position **Aktogay and Bozshakol** • Operate at design capacity • Optimise supply chain **East Region and Bozymchak** • Achieve production and cost targets
Aktogay • Progress Aktogay expansion project **Baimskaya** • Progress feasibility study • Initial site infrastructure • Discuss financing with potential lenders • Assess partnering options	**Aktogay** • Expansion project progressed **Baimskaya** • Feasibility study on track for completion later in the first half of 2020 • Site infrastructure works commenced • Financing discussions progressed, pending bankable feasibility study • Partnering options assessment ongoing	**Baimskaya** • Complete bankable feasibility study • Develop execution strategy • Continue pioneer works
Health and safety • Target zero fatalities • Reduce injury rate **Environment** • Maintain energy efficiency • Reduce water consumption at Bozshakol **Employees** • Improve professional development and communication **Communities** • Maintain community consultation initiatives • Provide funding for social projects	**Health and safety** • Two fatalities in underground operations • Injury rate reduced to TRIFR of 1.38 (2018: 1.74) **Environment** • Energy efficiency improved and CO_2 emissions intensity reduced • Water consumption reduced **Employees** • Apprentice programme launched **Communities** • $22 million of social project funding in 2019	**Health and safety** • Target zero fatalities and LTIs, reduce TRIFR **Environment** • Implement plan to achieve CO_2 and water reduction targets • Assess environmental impacts at Baimskaya **Employees** • Focus on recruitment, training and leadership development programmes • Support diversity through equality of opportunity **Communities** • Support social projects

PROXIMITY TO MARKETS



* Contains by-products of gold and silver in concentrate.
** Copper cathode, gold bar and silver bar are produced under a tolling arrangement with the Balkhash smelter.

Our products

The Group's revenues are primarily derived from the sale of copper with additional revenues from by-products of gold, silver and zinc. The Group's performance is therefore dependent on commodity prices, which reflect global supply and demand fundamentals, as well as market sentiment and the activities of financial investors. Commodity prices can be volatile and cyclical as a result of dependence upon geopolitical and macroeconomic factors. The outlook for the Chinese economy is of particular significance as it is the largest consumer of copper and the main physical market for the Group.

Around 53% of the Group's revenues arise from the sale of copper concentrate, primarily to China, with some material sold to smelters in the CIS region. Copper concentrate is sold at a provisional LME copper price less TC/RCs, which is adjusted to a final price, typically the second month after delivery. A further 37% of Group revenue is derived from the sale of copper cathode, mainly to Chinese and European customers. Sales are made at a provisional LME price, which is adjusted to a final price, typically one month after delivery. Remaining revenues derive from by-products of gold, silver and zinc.

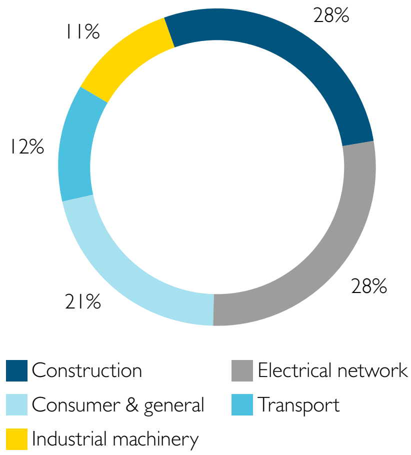
Uses of copper

Copper's excellent electrical and thermal conductivity make it essential for all modern infrastructure, energy generation and transmission, transportation, communications, industrial machinery and electrical appliances.

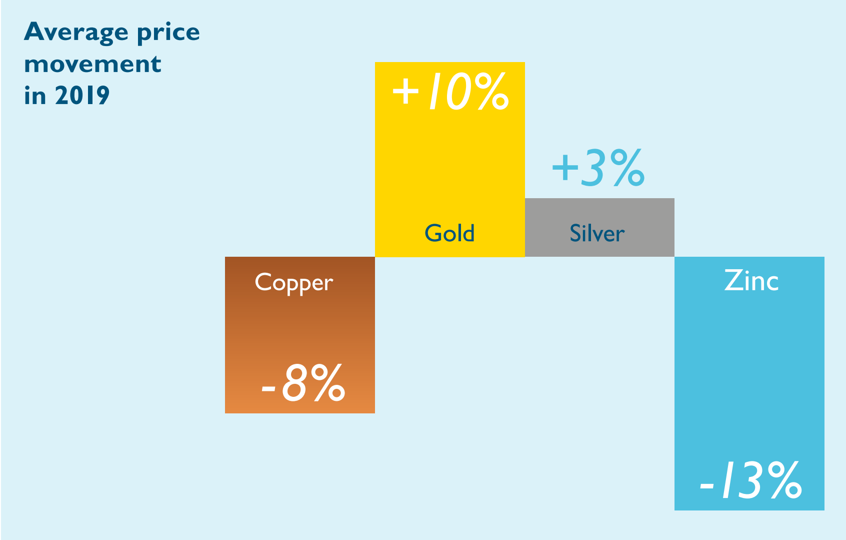
Two primary end users of copper are the construction sector and in electrical networks, making it a key material supporting the rapid urbanisation of Asia and Africa. Consumer products, air conditioning and refrigeration are also important sources of demand for copper, which may increase as developing economies transition to consumption led growth.

Copper also plays a central role in the global transition towards greener sources of energy. Solar and wind power require higher amounts of copper per unit of energy produced than fossil fuel based power generation, and the adoption of electric and hybrid vehicles and their associated charging infrastructure will need significantly more copper than the existing internal combustion fleet.

Global copper consumption in 2019 by market sector



Source: Wood Mackenzie, long-term outlook Q4 2019.



2019 market performance

The average LME copper price during 2019 was $6,000/t, an 8% decrease compared with $6,526/t in the prior year.

The copper price ended 2018 on a downward trend which reversed in early 2019. A weaker US dollar and improved investor sentiment regarding the Chinese economy helped to support prices, resulting in the copper price reaching a high of $6,572/t in March 2019. The price remained above $6,300/t until May 2019, after which an intensification of the US-China trade dispute and deteriorating macroeconomic data placed downward pressure on the copper price.

Movements in the copper price thereafter were primarily driven by developments in trade negotiations and the consequent effect on the outlook for the Chinese economy.

The copper price was weak throughout the second half of the year, with the average price of $5,841/t lower than the first half of the year ($6,211/t). The copper price reached a low of $5,537/t in early September but from October was on an upward trend following continued unrest in Chile and a decline in LME stocks. The price then ended the year relatively strongly, rising to $6,185/t in December following reports of an initial US-China trade deal.

Market outlook

The weakness in the copper price during 2019 was primarily reflective of negative macroeconomic news flows rather than being rooted in copper supply and demand. In 2020 the copper price has been adversely affected by concerns over the emergence of the Covid-19 coronavirus. In the short-term, actions to mitigate the impact and spread of this virus and news of progress in the US-China trade negotiations are likely to be key drivers of the copper market. However, the low levels of physical inventories and ongoing supply risks from key producing countries in the physical copper market mean that copper is well placed for any upturn in macroeconomic sentiment and physical demand.

There continues to be a broad consensus that the market for copper will enter a period of supply deficit in the medium to long-term. Copper supply is expected to be restricted by declining ore grades, insufficient investment and a lack of major new deposits. Large scale copper projects with the potential to fill the supply gap are scarce, with many projects facing significant economic, political and environmental challenges. With long lead times required to bring new production to market, this could result in a sustained supply deficit and support higher copper prices.

In the short term the copper market is expected to remain tight as moderate demand increases are offset by new production. As a result, copper prices will continue to be volatile and susceptible to market sentiment.

By-products

2019 market performance

Gold prices performed strongly during 2019 as prevailing macroeconomic concerns and the perception of gold as a safe haven asset led to price increases. The average price in 2019 of $1,393/oz increased by 10% compared with 2018. Silver prices were on average 3% higher in 2019 than 2018, at $16.2/oz, also as a result of global economic uncertainty driving demand for precious metals. Zinc traded poorly compared to other metals during 2019, with the average price of $2,546/t 13% lower than the average for 2018. Zinc prices began 2019 strongly as warehouse stocks were depleted but from April onwards the price trended downwards as a result of weak global demand.

Market fluctuations: how we respond

KAZ Minerals continually monitors commodity market and industry research. When performing business planning or assessing investment opportunities, the Group considers a range of commodity price cases and performs sensitivity analysis. The Group has cost competitive assets which can generate positive cash flow in a lower commodity price environment. The Group's operations are also located in close proximity to its key Chinese market.

The Group is not currently and does not normally hedge commodity prices but may enter into a hedge programme where the Board determines it is appropriate to provide greater certainty over future cash flows. In periods of lower prices, the Group has successfully reduced costs and been able to defer non-critical expenditures.

Sensitivity analysis on price

The approximate effect on EBITDA resulting from a 10% movement in the average realised commodity prices on the Group's results is shown below, assuming all other variables remain constant:

	Average realised price (2019)[1]	Impact of 10% price movement on EBITDA ($m)
Copper sales ($/t)	5,757	182
Gold sales ($/oz)	1,413	32
Silver sales ($/oz)	16	6
Zinc sales ($/t)	1,548	6

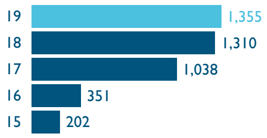
1 Copper, gold and silver sales reflect finished metal and payable metal in concentrate. Zinc sales reflect sales of zinc in concentrate.

MEASURING
OUR PROGRESS

Objective: deliver value for our shareholders

EBITDA[1]
($ million)

1,355



Relevance
This is a measure of the underlying profitability of the Group, widely used in the mining sector.

How we measure
EBITDA is earnings before interest, taxation, depreciation, depletion, amortisation, MET and royalties and special items.

2019 performance
EBITDA was $45 million higher than 2018 due to increased copper and gold sales volumes, partially offset by a lower copper price in the year.

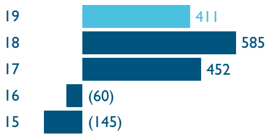
Aktogay EBITDA rose by $34 million to $564 million due to increased sales volumes following a strong operational performance at the sulphide concentrator which operated at design capacity over the year.

Bozshakol EBITDA of $585 million improved from $520 million in 2018, largely due to higher gold sales volumes, including the sale of inventory brought forward from the prior year, and a favourable gold price.

East Region and Bozymchak EBITDA declined by 19% to $230 million (2018: $284 million) due to reduced copper and zinc revenues arising from lower market prices and a decrease in sales volumes.

Free Cash Flow[1]
($ million)

411



Relevance
This measures the cash generated by the Group which is available to reduce debt, fund returns to shareholders and invest in the future growth and development of the business.

How we measure
Net cash flow from operating activities before capital expenditure and VAT associated with major growth projects less sustaining capital expenditure.

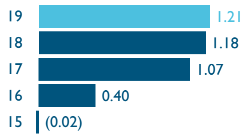
2019 performance
Group Free Cash Flow for the year was $411 million compared with $585 million recorded in the prior year, as the rise in EBITDA was offset by higher working capital requirements and an increase in sustaining capital expenditure.

Working capital increased by $282 million (2018: increase of $115 million) primarily due to the acquisition of consumables and spare parts to support sustained operations at Aktogay and Bozshakol as well as the stockpiling of clay ore and low grade ore. In addition working capital was impacted by the timing of trade receivables and VAT receipts.

Sustaining capital expenditure increased to $142 million from $85 million in 2018 as maintenance activities at Aktogay and Bozshakol normalise as the operations mature.

Earnings per share based on Underlying Profit/(Loss)[1] ($)

1.21



Relevance
EPS based on Underlying Profit/(Loss) can be used as an indication of profits available to shareholders for distribution or retention in the business.

How we measure
Profit/(loss) excluding special items and their resulting tax and non-controlling interest effects, divided by the weighted average number of ordinary shares in issue during the period.

2019 performance
EPS based on Underlying Profit/(Loss) increased to $1.21 per share from $1.18 per share in 2018.

Underlying Profit improved by $41 million to $571 million (2018: $530 million) following a strong operational performance from Aktogay and Bozshakol. The Group's operating profit before special items increased to $923 million from $871 million in 2018 primarily as a result of increased EBITDA and the beneficial effect of a weaker tenge on local operating costs.

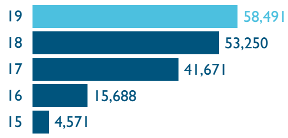
1. Alternative Performance Measures (APMs) are used to assess the performance of the Group and are not defined or specified under IFRS.
For further information on APMs, please refer to the APMs section on page 184.

The Group's KPIs are regularly reviewed to ensure they remain relevant and are aligned with the Group's strategy and objective. The remuneration of the executive Directors is linked to the Group's performance as the annual bonus plan targets are aligned to the Group's KPIs and strategic priorities.

Strategic priorities: optimise existing assets and deliver growth projects

Ore processed
(kt)

58,491



Relevance
Ore processed indicates the Group's ability to process ore that has been extracted, to maximise output.

How we measure
Kilotonnes of ore processed from our mining operations.

2019 performance
Ore processed of 58,491 kt was 10% higher than in the prior year (2018: 53,250 kt) driven by increased throughput at the Aktogay sulphide concentrator and additional volumes processed at Bozshakol.

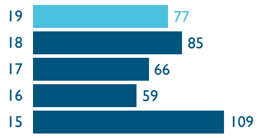
At Aktogay, 25,230 kt of sulphide ore was processed in 2019, a 21% increase versus 2018 (20,766 kt), as the sulphide concentrator operated at design capacity over the year.

At Bozshakol, ore processed increased by 4% to 29,470 kt (2018: 28,454 kt) as the sulphide concentrator operated at design capacity over the year.

Ore processed at the East Region and Bozymchak mines was lower than the prior year at 3,791 kt (2018: 4,030 kt), as 2018 benefited from additional processing of stockpiled ore.

Net cash costs[1]
(USc/lb)

77



Relevance
This measures the performance of the Group in maintaining its low cost base whilst maximising revenues through the sale of by-products.

How we measure
Cash operating costs, including pre-commercial production costs, excluding purchased cathode, plus TC/RC on concentrate sales, less by-product revenues, divided by the volume of own copper sales.

2019 performance
The Group's net cash cost of 77 USc/lb was below the prior year figure of 85 USc/lb. Excluding the impact of by-product credits, the Group's 2019 gross cash cost of 140 USc/lb was lower than the 144 USc/lb recorded in 2018.

The net cash cost at Aktogay of 98 USc/lb reduced versus the prior year (2018: 103 USc/lb) as a result of increased copper sales.

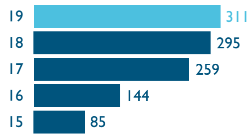
Bozshakol's gross cash cost of 137 USc/lb was higher than the 129 USc/lb reported in the prior year due to the inclusion of charges associated with the sale of gold bar inventory brought forward from 2018. The net cash cost at Bozshakol was 31 USc/lb (2018: 58 USc/lb).

East Region and Bozymchak reported a combined gross cash cost of 234 USc/lb, a decrease compared to 244 USc/lb in 2018 as a result of the sale of stockpiled material in 2019 and favourable exchange rates. Net cash costs increased to 104 USc/lb (2018: 94 USc/lb) following lower by-product sales from zinc.

KAZ Minerals has maintained its position as one of the lowest cost pure-play copper producers globally.

Copper production
(kt)

311



Relevance
Copper, the Group's principal product, represents 80% of revenue and its production is the main operational indicator.

How we measure
Payable copper metal in concentrate, and copper cathode produced from oxide ore at Aktogay.

2019 performance
Copper production increased by 6% to 311.4 kt from 294.7 kt in 2018 due to a higher contribution from Aktogay sulphide which operated at design capacity during the year. Copper production was above the Group's 2019 guidance of c. 300 kt.

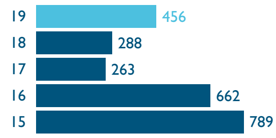
At Aktogay, total production rose to 145.7 kt (2018: 131.4 kt) benefiting from additional volumes from Aktogay sulphide which produced 123.0 kt (2018: 105.7 kt) with an average copper grade of 0.58% (2018: 0.61%).

At Bozshakol, copper production increased to 110.2 kt (2018: 101.6 kt) due to higher throughput levels at the sulphide concentrator. The average copper grade remained consistent with the prior year at 0.48%.

Copper production at East Region and Bozymchak of 55.5 kt was 10% below the 61.7 kt achieved in 2018 due to lower processing volumes and a decline in the copper grade in ore processed to 1.71% (2018: 1.81%).

Maintenance spend per tonne of copper produced[1] ($/t)

456



Relevance
Indicates how much cash is required to maintain current output and the efficiency of the Group's sustaining capital expenditure.

How we measure
Sustaining capital expenditure divided by copper production volumes.

From 2017 onwards, the KPI includes production and capital expenditure from all operations including Aktogay and Bozshakol as compared to 2016 and earlier years where the production and capital expenditure from Aktogay and Bozshakol were excluded.

2019 performance
Maintenance spend per tonne of copper produced increased by 58% to 456 $/t compared to 288 $/t in 2018 as maintenance costs associated with the Aktogay and Bozshakol operations normalise. In prior periods the newer operations benefited from low maintenance requirements.

Aktogay maintenance spend per tonne of copper produced rose from 152 $/t in 2018 to 302 $/t in 2019 due to a $24 million increase in sustaining capital expenditure, partially offset by a 14 kt increase in copper production.

Bozshakol maintenance spend per tonne of copper produced increased to 490 $/t in 2019 from 236 $/t in 2018, as sustaining capital expenditure rose by $31 million.

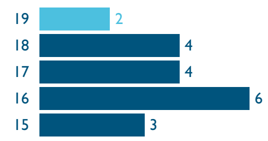
East Region and Bozymchak maintenance spend per tonne of copper produced increased in 2019 to 775 $/t from 648 $/t in 2018 as a result of higher capital expenditure and lower production volumes.

Goal Zero

Number of fatalities

(employees and contractors)

2



Relevance

A key measure of the Group's operational health and safety performance.

How we measure

The number of employee and contractor fatalities directly occurring from an occupational injury or disease at the Group's operations during the year. The definition of an occupational fatality is taken from the ICMM health and safety performance indicators published in January 2014, which the Group adopted in 2015.

2019 performance

Two fatalities occurred in 2019 in the Group's underground mines in the East Region (2018: 4). One fatality resulted from a rock fall and the second from a blasting incident.

KAZ Minerals considers all fatalities to be avoidable and has a target of zero fatalities. The number of fatal incidents occurring at the Group's operations is on a long-term downward trend.

No fatalities have occurred at any of the Aktogay, Bozshakol and Bozymchak mines since these mines commenced production, covering a total of 53 million man hours worked.

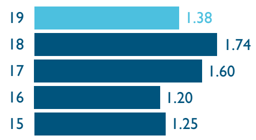
During 2019 the Group launched a comprehensive new health and safety initiative, 'Goal Zero', aimed at reducing health, safety and environmental incidents to zero.

In 2020, an enhanced risk assessment process, specifically modified for effective identification and escalation of hazardous ground conditions, is being implemented in the Group's underground operations.

Total Recordable Injury Frequency Rate

(TRIFR)

1.38



Relevance

TRIFR measures the frequency of occupational injuries occurring at the Group's operations and is therefore a key indicator of our health and safety performance.

How we measure

The number of Total Recordable Injury (TRI) cases occurring for every million man-hours worked during the year. The definitions of TRI and TRIFR are taken from the ICMM health and safety performance indicators published in January 2014.

2019 performance

The average TRIFR for ICMM members in 2018 was 3.41, compared to the TRIFR for the Group in 2019 of 1.38.

There were 63 TRI cases in 2019 (2018: 61). However, TRIFR reduced as man hours worked increased by 31% to 46 million (2018: 35 million), with the majority of the increase due to the 12 million man hours worked at the Aktogay II construction project.

The reduction in TRIFR was achieved despite construction work being inherently more dangerous than open pit mining, due to the increased number of hazards and the constantly changing work environment.

> "We believe that all fatalities are avoidable and we will continue to implement the necessary cultural and procedural changes to achieve zero fatalities"

Andrew Southam
Chief Executive Officer

INCREASING PRODUCTION

The Group's operations in 2019 comprised the Aktogay and Bozshakol open pit copper mines in the East Region and Pavlodar region of Kazakhstan, three underground mines in the East Region of Kazakhstan, the Bozymchak copper-gold mine in Kyrgyzstan and their associated concentrators.

Financial performance

		EBITDA ($ million)	Gross cash costs (USc/lb)	Net cash costs (USc/lb)
Group	2019	1,355	140	77
	2018	1,310	144	85
Aktogay	2019	564	102	98
	2018	530	106	103
Bozshakol	2019	585	137	31
	2018	520	129	58
East Region and Bozymchak	2019	230	234	104
	2018	284	244	94

Group production and sales summary

	Production		Sales	
kt (unless otherwise stated)	2019	2018	2019	2018
Copper	311	295	317	296
Aktogay	146	131	148	130
Bozshakol	110	102	107	102
East Region and Bozymchak	55	62	62	64
Gold (koz)	201	183	225	169
Silver (koz)	3,382	3,511	3,566	3,527
Zinc in concentrate	38	50	38	50

AKTOGAY

Aktogay is a large scale, open pit mine with a remaining mine life of around 25 years (including the expansion project) at an average copper grade of 0.35% (oxide) and 0.33% (sulphide). Aktogay is competitively positioned on the global cost curve and will produce an average of 100 kt of copper per year from sulphide ore until 2021, increasing to 170 kt per year from 2022 to 2027, after the second concentrator commences operations.

Production summary

kt (unless otherwise stated)	2019	2018
Oxide		
Ore extraction	**19,403**	16,104
Copper grade (%)	**0.32**	0.33
Copper cathode production	**22.7**	25.7
Sulphide		
Ore extraction	**35,731**	25,807
Ore processed	**25,230**	20,766
Average copper grade processed (%)	**0.58**	0.61
Recovery rate (%)	**88**	87
Copper in concentrate	**128.8**	110.6
Copper production	**123.0**	105.7
Total copper production	**145.7**	131.4
Silver production (koz)	**555**	489

At Aktogay total ore extraction increased by 32% to 55,134 kt (2018: 41,911 kt) to meet the requirements of the sulphide plant and in preparation for the Aktogay expansion project. Sulphide ore extraction increased by 38% to 35,731 kt, exceeding processing volumes due to the removal of low grade material to access high grade ore for processing in 2019 and for project development works. A total of 8.9 Mt of lower grade sulphide ore was stockpiled during the year.

Sulphide ore processing volumes increased to 25,230 kt in 2019 as the sulphide concentrator operated at its design capacity over the year and benefited from the deferral of mill maintenance from December 2019 to January 2020. The average copper grade processed in 2019 reduced, as expected, to 0.58% (2018: 0.61%) but remained at elevated levels compared to the copper resource grade of 0.33%. Full year copper production from sulphide ore of 123.0 kt was 16% higher than the 105.7 kt produced in 2018, mainly due to higher ore throughput and an increase in recovery rates, which more than offset the reduction in grade.

The majority of copper production was dispatched as concentrate to customers in China, with 43.7 kt of copper in concentrate sent for toll processing at the Balkhash smelter in Kazakhstan where spare capacity was available on attractive terms.

Copper cathode production from oxide material was 22.7 kt in 2019, 3.0 kt lower than 2018 due to a lower average copper grade. Following the construction of the second stage of heap leach cells, first oxide ore was placed on the leach pads in the fourth quarter of 2019, with leaching due to commence in 2020. Cathode production of 22.7 kt was consistent with long-term guidance of c.20 ktpa until 2024.

Aktogay achieved record total copper production of 145.7 kt in 2019, above full year guidance of 130-140 kt and an 11% increase compared with 2018. These volumes were achieved due to a combination of high grades, consistent ore throughput and the deferral of mill maintenance from December 2019 to January 2020. Sulphide processing grades are forecast to reduce towards the life of mine grade over the first ten years of operations and the average grade expected during the period 2019-2021 inclusive is c.0.50%. Copper production for 2020 is guided at 120-130 kt, including approximately 20 kt from oxide ore. In addition, Aktogay is expected to produce around 500 koz of silver in 2020.

Ore processed

25,230 kt

Financial summary

$ million (unless otherwise stated)	2019	2018
Revenues	863	775
Copper sales (kt)	148	130
EBITDA	564	530
Operating profit	381	350
Gross cash costs (USc/lb)	102	106
Net cash costs (USc/lb)	98	103
Capital expenditure	553	514
Sustaining	44	20
Expansionary	509	494

Revenues

Revenues increased by 11% to $863 million during 2019, resulting from increased sales volumes following the strong operational performance in the year. The 18 kt increase in copper sales during 2019 had a $102 million beneficial impact on copper revenues, partially offset by an $18 million adverse impact from lower realised copper prices. The average LME copper price decreased by 8% from $6,526/t in 2018 to $6,000/t in 2019, and copper sales were weighted towards the second half of the year when prices were lower. Sales included 65 kt of cathode material, comprising 23 kt produced at the Group's SX/EW plant and 42 kt from copper concentrate processed at the Balkhash smelter. The higher volume of material allocated to smelting in 2019 compared with 2018 positively impacts revenues as toll processed metal is recorded as revenue excluding TC/RCs. Aktogay also recorded $14 million of by-product revenues, primarily from commercially payable quantities of silver and gold.

EBITDA

Aktogay's EBITDA increased to $564 million in 2019, benefiting from the increased revenues in the year. The EBITDA margin remained highly competitive at 65%.

The gross cash cost is expressed on a unit of copper sales basis, after adjustment for the copper payable and TC/RCs. Gross cash costs at Aktogay were 102 USc/lb in 2019, marginally below market guidance of 105-125 USc/lb. Gross cash costs reduced compared with 2018, as the operations benefited from economies of scale from higher output as well as a weaker tenge, which traded at an average of 383 KZT/USD compared with 345 KZT/USD in the previous year. In addition, the deferral of scheduled mill maintenance from December 2019 to January 2020 had the effect of reducing 2019 costs and increasing throughput. This more than offset the impact of cost increases for certain inputs including salaries, fuel and consumables. Cash operating costs include social expenditure of $10 million which has been excluded from gross cash costs as it is not considered directly attributable to mining and processing at Aktogay and benefits the wider Group.

The gross cash cost in 2020 is forecast to be 110-130 USc/lb. The increase compared with 2019 largely reflects the expected reduction in output arising from lower grades. Costs are also expected to increase marginally due to the impact of general inflation, as well as increased maintenance resulting from the mill shutdown being deferred into January 2020.

Revenues

$863 million

Operating profit

Operating profit increased by $31 million to $381 million during 2019, reflecting the strong production and cost performance of the mine in the year. The $34 million increase in EBITDA was partially offset by higher MET charges as a greater volume of ore was mined in preparation for the Aktogay expansion project.

Capital expenditure

Sustaining capital expenditure at Aktogay was $44 million, consistent with market guidance of $50 million. The increase from the prior year reflects increased maintenance as the operation matures, as well as construction works to increase the capacity of the tailings storage facility. Approximately $20 million was incurred on the tailings construction in 2019 to provide interim capacity. The tailings construction will continue during 2020 and 2021 to ensure sufficient capacity in advance of the Aktogay expansion. Total sustaining capital expenditure of $60 million, including tailings, is expected in 2020.

The total expansionary capital expenditure at Aktogay of $509 million includes $459 million relating to the Aktogay expansion project which is progressing in line with expectations. Expenditure in the year included around $210 million on equipment for the sulphide concentrator, for which procurement is largely committed. Construction activities continued, incurring c.$175 million of expenditure in the year. In addition, approximately $45 million was incurred to upgrade the mine fleet. In 2020, expenditure of around $400 million on the Aktogay expansion project is forecast. The total capital budget for the project is unchanged at $1.2 billion and first production from the plant is expected in 2021 as previously guided.

Expansionary capital expenditure in 2019 includes $50 million in respect of the original Aktogay project, incurred on final retention payments to contractors and construction of the second stage of heap leach cells for oxide operations. Work on the first Aktogay project has been largely concluded, with limited spend expected in the first half of 2020 to finalise and commission the new heap leach cells.

BOZSHAKOL

Bozshakol is a first quartile asset on the global cost curve with an annual ore processing capacity of 30 million tonnes and a remaining mine life of around 40 years at an average copper grade of 0.36%. The mine and processing facilities commenced output in 2016 and will produce an average of 100 kt of copper cathode equivalent and 120 koz of gold in concentrate per year over the first 10 years of operations.

Production summary

kt (unless otherwise stated)	2019	2018
Ore extraction	**35,693**	30,722
Ore processed	**29,470**	28,454
Average copper grade processed (%)	**0.48**	0.48
Copper recovery rate (%)	**81**	79
Copper in concentrate	**115.4**	106.4
Copper production	**110.2**	101.6
Average gold grade processed (g/t)	**0.27**	0.26
Gold recovery rate (%)	**60**	59
Gold in concentrate (koz)	**154.9**	136.7
Gold production (koz)	**144.8**	127.8
Silver production (koz)	**803**	666

Ore extracted at Bozshakol increased by 16% to 35,693 kt as higher volumes of clay ore were extracted in order to access further sulphide ore. From 2020 it is expected that the amount of clay ore processed from stockpiles will exceed mined volumes.

Processing volumes of 29,470 kt were 4% higher than in the previous year (2018: 28,454 kt) and slightly below the design ore capacity for Bozshakol of 30 Mtpa. The main sulphide concentrator operated at full design capacity for the year. In the first half of 2019 operations at the clay plant were suspended for around three months during a programme of upgrades to the water system to increase recycling rates and reduce the consumption of fresh water, following which it performed well, processing over 3 Mt of material in the second half.

The average copper grade processed was 0.48%, consistent with market guidance and the prior year. The average recovery rate improved to 81% (2018: 79%), and combined with the higher levels of ore processed in the second half of the year, resulted in an increase in total copper production to 110.2 kt compared with 101.6 kt in 2018. Copper production was therefore at the mid-point of guidance of 105-115 kt.

Gold production of 144.8 koz rose by 13% compared with 2018, supported by higher average gold grades and improved recovery rates. Gold production was in excess of guidance of 130-140 koz. Silver production also increased from 666 koz in 2018 to 803 koz in 2019, ahead of guidance of approximately 700 koz, due to higher processed grades.

The majority of copper production was dispatched as concentrate to customers in China, with 13.6 kt of copper in concentrate sent for toll processing at the Balkhash smelter in Kazakhstan, where spare capacity on attractive terms was available.

Copper production in 2020 is expected to be 110-120 kt with by-products of gold and silver guided at 140-150 koz and 700 koz respectively. Both the sulphide and clay plants are planned to operate at full design capacity, with a slight increase in copper grade forecast.

Ore processed

29,470 kt

Financial summary

$ million (unless otherwise stated)	2019	2018
Revenues	851	756
Copper	601	596
Gold	234	144
Silver	13	11
Other	3	5
Sales volumes		
Copper sales (kt)	107	102
Gold sales (koz)	165	115
Silver sales (koz)	772	724
EBITDA	585	520
Operating profit	427	361
Gross cash costs (USc/lb)	137	129
Net cash costs (USc/lb)	31	58
Capital expenditure	92	29
Sustaining	55	24
Expansionary	37	5

Revenues

Revenues increased by $95 million to $851 million in 2019 and benefited from higher sales volumes for all products compared with 2018, as well as higher realised gold and silver prices. Copper revenues were broadly in line with the prior year, as the positive impact of increased sales volumes was offset by a lower realised price. Copper sales include 10 kt of copper cathode produced from concentrate processed at the Balkhash smelter. Gold sales volumes of 165 koz were significantly higher than production, benefiting from the sale of 25.6 koz of gold bar inventory accumulated at the end of 2018. Gold revenues increased by 62% to $234 million due to the higher sales volumes combined with an increase in the average LBMA price of gold from $1,268/oz in 2018 to $1,393/oz in 2019.

EBITDA

Bozshakol contributed $585 million of EBITDA, an increase of $65 million compared with 2018 as higher revenues were partially offset by a rise in operating costs. The mine generated a strong EBITDA margin of 69%, consistent with 2018.

Revenues

$851 million

Bozshakol's gross cash cost of 137 USc/lb increased from 129 USc/lb in 2018. The reported figure of 137 USc/lb includes charges associated with the sale of 25.6 koz of gold bar inventory brought forward from 2018. The production costs associated with the sale of this material increased gross cash costs by around 5 USc/lb. The 2019 gross cash cost was towards the lower end of the guidance range of 130-150 USc/lb, due to a reduction in the consumption of consumables and a weaker KZT/USD exchange rate. These beneficial factors were partially offset by higher mill relining expenses and some cost inflation, which included local salaries.

The net cash cost at Bozshakol, after deducting by-product credits, was 31 USc/lb. This cash cost incorporates the sale of gold bar inventory brought forward from 2018 which benefited net cash costs by 9 USc/lb. This represents an improvement on the prior year, a result of favourable gold prices and strong gold production in 2019.

The gross cash cost for 2020 is forecast to be 130-150 USc/lb, consistent with the guidance for 2019, as the benefit of increased forecast grades and production is offset by higher costs associated with the maturing mine, including a deeper pit, longer haulage distances and further maintenance costs.

Operating profit

Operating profit rose by $66 million to $427 million during 2019, in line with the increase in EBITDA.

Capital expenditure

Sustaining capital expenditure was $55 million during 2019, an increase in comparison to 2018 when the maintenance requirements were lower due to the earlier stage of the operations. Expenditure during the year was mainly associated with the purchase and overhaul of mining equipment as well as construction work to increase the storage capacity of the tailings facilities. In 2020 sustaining capital expenditure is expected to be approximately $60 million, reflecting the higher levels of maintenance required as the operations mature and further tailings work. Going forward average annual sustaining capital expenditure is expected to be in the region of $50 million per annum, incorporating periodic works to increase tailings storage capacity.

Expansionary capital expenditure of $37 million was incurred during the first half of the year, primarily on final retention payments made to contractors for work performed in previous periods.

EAST REGION AND BOZYMCHAK

The Group owns and operates three polymetallic underground mines and associated concentrators in the East Region of Kazakhstan and Bozymchak, a copper and gold open pit mine in Kyrgyzstan.

Production summary

Copper

kt (unless otherwise stated)	2019	2018
Ore extraction	**3,879**	3,892
Ore processed	**3,791**	4,030
Average copper grade processed (%)	**1.71**	1.81
Average recovery rate (%)	**90**	90
Copper in concentrate	**58.7**	65.3
Copper production	**55.5**	61.7

By-products

kt (unless otherwise stated)	2019	2018
Gold bearing ore processed	**3,791**	4,030
Gold grade processed (g/t)	**0.70**	0.73
Gold in concentrate (koz)	**57.1**	58.5
Gold production (koz)	**53.7**	55.0
Silver bearing ore processed	**3,791**	4,030
Silver grade processed (g/t)	**29.2**	33.4
Silver in concentrate (koz)	**2,223**	2,590
Silver production (koz)	**2,024**	2,356
Zinc bearing ore processed	**2,767**	3,028
Zinc grade processed (%)	**2.06**	2.42
Zinc in concentrate	**38.3**	49.7

Copper production in the East Region and Bozymchak of 55.5 kt was in line with market guidance of around 55 kt, and represents a 6.2 kt (10%) reduction from the prior year. The volume of ore processed was consistent with ore extraction, but decreased by 6% to 3,791 kt as the prior year benefited from the processing of stockpiles. Average copper grades processed in 2019 reduced to 1.71%, mainly a result of lower grades at Orlovsky where difficult geological conditions prevented access to higher grade zones. The Bozymchak concentrator operated at full capacity throughout the year, contributing 7.0 kt of copper production.

Following a strategic review, the Belousovsky concentrator was closed on 25 October 2019 to improve operational efficiency. Ore extracted from the Irtyshsky mine was subsequently transported to the Nikolayevsky concentrator for processing, making use of available capacity. The Belousovsky concentrator has since been disposed of.

At Artemyevsky, grades and processing volumes will remain at around current levels, until extraction commences from the second ore body, which is expected from 2022. Production from Orlovsky over the remaining life of the mine is expected to be at or below current output, as mining takes place in deeper horizons and more challenging geological conditions. Copper production from the East Region and Bozymchak is therefore expected to decrease to approximately 50 kt in 2020.

Production levels for all by-products at the East Region and Bozymchak reduced in 2019. Zinc in concentrate output of 38.3 kt was below the guidance of 40-45 kt, impacted by lower than expected grades. The largest reduction was at the Orlovsky mine, which produced 11.6 kt in 2019 compared with 24.8 kt in the previous year. Zinc in concentrate output is similarly impacted by the factors affecting copper production at Orlovsky and Artemyevsky.

Full year gold production of 53.7 koz was in excess of the market guidance range of 45-50 koz and was marginally below the prior year. This was the result of a strong performance from the Bozymchak mine, which contributes the majority of gold production (40.8 koz, 2018: 39.7 koz) and where grades were higher than expected.

Silver production of 2,024 koz was 12% ahead of market guidance of 1,800 koz. 2019 output reduced by 332 koz compared with the prior year as a result of a reduction in silver grades processed, mainly at Orlovsky.

East Region and Bozymchak is forecast to produce 40-50 koz of gold and approximately 1,800 koz of silver in 2020, below the levels achieved in 2019 but consistent with the reduction in copper volumes. Zinc in concentrate production is expected to be around 40 kt.

Financial summary

$ million (unless otherwise stated)	2019	2018
Revenues	552	631
Copper	374	417
Gold	80	68
Silver	36	37
Zinc	58	101
Other	4	8
Sales volumes		
Copper sales (kt)	62	64
Gold sales (koz)	57	54
Silver sales (koz)	2,211	2,362
Zinc sales (kt)	38	50
EBITDA	230	284
Operating profit	140	165
Gross cash costs (USc/lb)	234	244
Net cash costs (USc/lb)	104	94
Capital expenditure	98	70
Sustaining	42	40
Expansionary	56	30

Revenues

Revenues in East Region and Bozymchak decreased by 13% in 2019 as a result of reduced sales of all products aside from gold, and lower average realised prices of copper and zinc. Copper sales volumes of 62 kt included the sale of finished goods inventory from the prior year and were above production of 55.5 kt. However, copper revenues were $43 million below 2018, mainly due to lower realised prices. Zinc revenues fell by $43 million due to a reduction in sales volumes and a lower market price for zinc. An increase in gold prices, combined with sale of stockpiled material, resulted in higher gold revenue of $80 million.

EBITDA

EBITDA in 2019 was $230 million, a $54 million decrease compared with 2018 which reflects the lower revenues, partially offset by a reduction in operating costs. Cash operating costs reduced by $25 million to $322 million, as a result of lower production volumes as well as favourable cost performance. Management took action to control costs during the year, including a rationalisation of concentrator capacity resulting in the closure of the Belousovsky concentrator, optimisation of shift schedules and transport routes, and a reduction in warehousing costs. Furthermore, operating costs in the East Region have a higher exposure to the tenge, which weakened by 11% (2019: average 383 KZT/USD, 2018: 345 KZT/USD). These beneficial factors more than offset local inflation on salaries and certain input costs. Gross cash cost performance was aided by the sale of 7 kt of finished goods copper inventory. As a result, the gross cash cost of copper for East Region and Bozymchak was 234 USc/lb, below the prior year and towards the bottom end of market guidance of 230-250 USc/lb.

Net cash costs rose to 104 USc/lb, despite the reduction in gross cash costs, due to the significant decrease in zinc revenues.

Gross cash costs for 2020 are estimated to increase to 260-280 USc/lb as sales volumes fall from 62 kt in 2019 to approximately 50 kt, a level consistent with planned production in 2020.

Revenues

$552 million

Operating profit

Operating profit of $140 million was $25 million lower than the prior year due to the reduction in EBITDA and the recognition of a $20 million impairment at Bozymchak in 2018.

Capital expenditure

Sustaining capital expenditure of $42 million was in line with the prior year and related primarily to mine development works in the underground mines, the expansion of tailings facilities and the purchase and overhaul of mining equipment. In 2020, the planned sustaining capital expenditure for East Region and Bozymchak is approximately $50 million, including some works deferred from 2019. This expenditure includes construction of a new in-pit tailings storage facility close to the Nikolayevsky concentrator which will reduce the Group's tailings footprint.

Expansionary capital expenditure of $56 million in 2019 was below the guidance of $70 million, as spend on the Artemyevsky extension and Bozymchak underground mine was partially deferred into 2020. 2019 expenditure was focused on the Artemyevsky development, where initial works on the ventilation shaft continued and surface fans were installed.

Approximately $75 million is expected to be incurred on expansionary capital expenditure in 2020. As previously guided, the Artemyevsky project is expected to require $60 million of expenditure per annum from 2020 to 2023, with limited spend thereafter. Initial works at the project in 2020 will include sinking shafts, commencing underground construction and capital mining works. Over the period from 2020 to 2024 a further $15 million per annum will be required for the development of the underground phase at Bozymchak, which will extend the mine life.

Baimskaya

During 2019 the Group progressed the bankable feasibility study for the Baimskaya copper project and commenced pioneer works at the site, incurring $111 million of capital expenditure during the year against guidance of $150 million. The bankable feasibility study is scheduled for completion in the first half of 2020. Capital expenditure of $150 million has been approved at Baimskaya in 2020 to complete the bankable feasibility study and continue pioneer works. The Group is evaluating whether to make additional equipment deliveries to Pevek in the 2020 shipping window and may consider approving additional capital expenditure later in the year.

Other projects

Following the $70 million investment in the Koksay project by NFC, study works began in the second half of 2019 with $5 million of capital expenditure incurred during the year. A feasibility study to determine the detailed design for mining and processing operations and the associated capital budget will be carried out in 2020. This will be reviewed by the Board before assessing how and when to proceed with the project. Approximately $20 million will be spent on Koksay and other minor projects during the year.

FINANCIAL REVIEW

John Hadfield
Chief Financial Officer

Basis of preparation

The financial information has been prepared in accordance with IFRSs, as adopted by the EU, using accounting policies consistent with those adopted in the consolidated financial statements for the year ended 31 December 2019, including the application of IFRS 16 '*Leases*' and '*Borrowing Costs Eligible for Capitalisation (Amendments to IAS 23)*' which were applicable from 1 January 2019. As the impact of IFRS 16 was not material to the Group, it was applied without the restatement of comparative information and there was no impact on retained earnings at 1 January 2019. The amendment to IAS 23 was applied prospectively from 1 January 2019. Further details are provided in the notes to the consolidated financial statements on page 132.

Income statement

An analysis of the consolidated income statement is shown below:

$ million (unless otherwise stated)	2019	2018
Revenues	2,266	2,162
Cash operating costs	(911)	(852)
EBITDA[1]	1,355	1,310
Less: MET and royalties	(196)	(200)
Less: depreciation, depletion and amortisation	(236)	(239)
Less: special items	–	(20)
Operating profit	923	851
Net finance costs	(197)	(209)
Profit before tax	726	642
Income tax expense	(155)	(132)
Profit for the year	571	510
Non-controlling interests	–	–
Profit attributable to equity holders of the Company	571	510
Earnings per share attributable to equity shareholders of the Company		
EPS based on Underlying Profit[1] – basic ($)	1.21	1.18
EPS based on Underlying Profit[1] – diluted ($)	1.17	1.18

1 APMs are used to assess the performance of the Group and are not defined or specified under IFRS. For further information on APMs, including justification for their use, please refer to the APMs section on page 184.

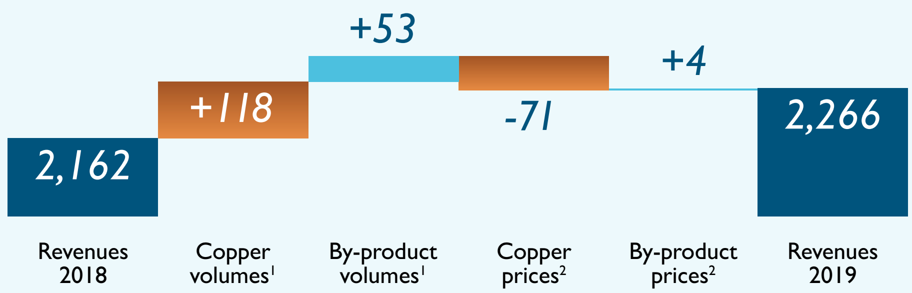
Revenues

Revenues for 2019 were $2,266 million, an increase of $104 million from the prior year, principally due to higher copper and gold volumes which more than offset lower copper prices. The increase in copper sales volumes of 21 kt, mainly from strong production at Aktogay, contributed additional revenues of $118 million.

Incremental by-product volumes added revenues of $53 million, as increased gold sales from higher production and the sale of gold bar inventory brought forward from 2018 at Bozshakol was partially offset by lower zinc volumes.

The increase in sales volumes more than offset the negative impact of lower realised copper prices (-$71 million) as the average LME

Change in revenues ($ million)



1 Change in sales volumes at current year realised prices.
2 Change in realised prices applied to prior year sales volumes.

price fell from $6,526/t in 2018 to $6,000/t in 2019. By-product prices benefited revenues by $4 million, as the average market price for gold (+10%) was offset by lower zinc prices (-13%).

Further information on revenues by operating segment can be found in the Operating review. Additional information on revenues and related credit risk management policies can be found in notes 4(b) and 33(f) to the consolidated financial statements.

Operating profit and EBITDA

Operating profit for 2019 was $923 million, an increase of $72 million versus the prior year, benefiting from the higher sales volumes. The Group's operating profit margin, measured as operating profit divided by revenues, increased to 41% from 39% in 2018 due to the absence of exceptional impairment charges in the current year and as operating costs benefited from the weaker average tenge exchange rate, offsetting the impact of lower commodity prices and higher administrative expenses. The tenge traded at an average of 383 KZT/$ in 2019, whilst recording an average of 345 KZT/$ in the prior year.

EBITDA for the Group of $1,355 million was $45 million above the prior year, with increased copper and by-product volumes contributing $79 million and $53 million respectively. The favourable impact of higher volumes was partially offset by lower copper prices, which reduced revenues by $71 million. In addition, there was a $20 million reduction in EBITDA due to higher cash operating costs, largely attributable to Aktogay and Bozshakol which had previously benefited from lower maintenance costs in the early years of operations, and additional social expenditure costs. The Group's EBITDA margin decreased slightly from 61% in 2018 to 60% in 2019.

Please refer to the Operating review for a detailed analysis of EBITDA by operating segment.

Items excluded from EBITDA

The MET and royalties charge in the income statement was $196 million in 2019, below the $200 million recorded in 2018 due to lower commodity prices which offset higher levels of extraction. The total MET and royalties incurred was $214 million (2018: $207 million), which additionally includes MET in unsold inventories on the balance sheet.

Depreciation, depletion and amortisation in 2019 of $236 million was lower than the $239 million incurred in 2018. The additional depreciation associated with the increase in property, plant and equipment was offset by the impact of the weaker average tenge during the year.

The prior year included a $20 million impairment in respect of Bozymchak arising from the non-recovery of VAT incurred during construction of the plant, which was expensed as a special item.

Net finance costs

Net finance costs include:

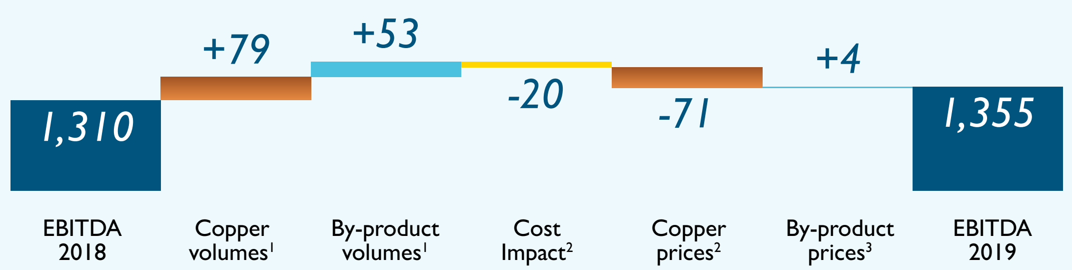
$ million	2019	2018
Interest income	18	33
Total interest incurred	(226)	(240)
Interest capitalised	37	4
Interest expense	(189)	(236)
Other finance costs	(26)	(6)
Net finance costs	**(197)**	(209)

Net finance costs of $197 million were $12 million lower than the prior year. Total interest incurred of $226 million reduced by $14 million as the average level of debt during the year reduced following scheduled repayments. This was partially offset by the impact of higher US dollar LIBOR rates.

Capitalised interest of $37 million in 2019 related to financing costs incurred on the DBK-Aktogay expansion facility and the use of the Group's general borrowings to fund the Aktogay expansion and Baimskaya capital projects and other qualifying assets (see note 12 on page 145).

Included within other finance costs are net exchange losses of $20 million (2018: net exchange gains of $3 million), which arose from a year-on-year appreciation of the tenge at 31 December 2019 compared with 31 December 2018, despite the tenge being on average weaker during 2019 than the prior year. This resulted in a non-cash foreign exchange loss on tenge denominated intercompany balances which was largely offset by translation gains recognised within equity.

Change in EBITDA ($ million)



1 Change in sales volumes at current year margin.
2 Net change in cash costs per tonne.
3 Change in realised prices applied to prior year sales volumes.

Taxation

The table below shows the Group's effective tax rate as well as the all-in effective tax rate which takes into account the impact of MET and removes the effect of special items (as applicable) on the Group's tax charge.

$ million (unless otherwise stated)	2019	2018
Profit before tax	726	642
Add: MET and royalties	196	200
Add: special items	–	20
Adjusted profit before tax	922	862
Income tax expense	155	132
Add: MET and royalties	196	200
Adjusted tax expense	351	332
Effective tax rate (%)	21	21
All-in effective tax rate[1] (%)	38	39

1 The all-in effective tax rate is calculated as the income tax expense plus MET and royalties less the tax effect of special items and other non-recurring items, divided by profit before taxation which is adjusted for MET and royalties and special items. The all-in effective tax rate is considered to be a more representative tax rate on the recurring profits of the Group.

The effective tax rate in 2019 was 21%, in line with the prior year. The all-in effective tax rate decreased marginally to 38% versus the prior year mainly due to a lower MET and royalties charge. As MET is determined independently of the profitability of operations, in periods of higher profitability the all-in effective tax rate decreases as the impact of MET and royalties is lower. Conversely, during periods of lower profitability, the MET and royalties impact on the all-in effective tax rate is elevated.

Profit attributable to equity holders of the Company and Underlying Profit

A reconciliation of Underlying Profit and profit attributable to equity holders of the Company to EPS and EPS based on Underlying Profit is set out below:

$ million (unless otherwise stated)	2019	2018
Profit attributable to equity holders of the Company	571	510
Special items within operating profit, net of tax – note 8	–	20
Underlying Profit[1]	571	530
Weighted average number of shares in issue (million) – basic	470	447
Potential dilutive ordinary shares, weighted for the period outstanding (million)	20	–
Weighted average number of shares in issue (million) – diluted	490	447
Ordinary EPS – basic ($)	1.21	1.14
Ordinary EPS – diluted ($)	1.17	1.14
EPS based on Underlying Profit[1] – basic ($)	1.21	1.18
EPS based on Underlying Profit[1] – diluted ($)	1.17	1.18

1 APMs are used to assess the performance of the Group and are not defined or specified under IFRS. For further information on APMs, including justification for their use, please refer to the APMs section on page 184.

The Group's profit attributable to equity holders of the Company was $571 million in 2019 compared with $510 million in the prior year, largely attributable to the increase in the Group's sales volumes.

EPS and EPS based on Underlying Profit

Basic EPS of $1.21 increased from $1.14 in 2018 due to the increase in earnings, partially offset by the increase in the weighted average number of ordinary shares in issue following the acquisition of the Baimskaya copper project in January 2019, which was partly settled with new ordinary shares (see note 5(a) on page 142). Diluted EPS of $1.17 reported in the current year takes into account the ordinary shares expected to be issued to settle the Deferred Consideration arising on the acquisition of the Baimskaya copper project (see note 14 on page 148), which were weighted over the period they were outstanding, from acquisition on 22 January 2019 to 31 December 2019. Underlying Profit of $571 million was $41 million higher than the prior year and no special items were included within operating profit (2018: $20 million).

Dividends

KAZ Minerals PLC, the parent company of the Group, is a non-trading investment holding company and derives its profits from dividends paid by subsidiary companies.

The Group's dividend policy, established at the time of Listing, is for the Board to consider the cash generation and financing requirements of the business before recommending a suitable dividend. This maintains flexibility, which is appropriate given the underlying cyclicality of a commodity business and the Group's growth ambitions.

In October 2019, the Company paid an interim dividend of 4.0 US cents per share equating to an interim payment of $19 million. The Board has recommended a final dividend for 2019 of 8.0 US cents per share, equivalent to a payment of $38 million, recognising the Group's strong operational and financial performance and its continued investment in growth at Aktogay and Baimskaya. Combined with the interim dividend of 4.0 US cents per share, the dividend in respect of the 2019 financial year is 12.0 US cents per share.

The financing requirements of the Baimskaya copper project will be assessed during the feasibility study, following which the Board will further review the Group's allocation of capital.

The final dividend of $28 million in respect of the year ended 31 December 2018 was paid on 17 May 2019.

The distributable reserves of KAZ Minerals PLC at 31 December 2019 were $1,367 million. See pages 174 to 180 for the financial statements of the Company.

Cash flows and movement in net debt

The summary of cash flows below is prepared on a basis consistent with internal management reporting.

$ million	2019	2018
EBITDA[1]	**1,355**	1,310
Change in working capital	**(282)**	(115)
Interest paid	**(230)**	(229)
MET and royalties paid	**(206)**	(208)
Income tax paid	**(92)**	(95)
Foreign exchange and other movements	**8**	7
Sustaining capital expenditure	**(142)**	(85)
Free Cash Flow[1]	**411**	585
Expansionary and new project capital expenditure	**(718)**	(530)
Acquisition of Baimskaya copper project, net of cash acquired	**(435)**	–
Net VAT (paid)/received associated with major growth projects	**(41)**	3
Interest received	**20**	32
Dividends paid	**(47)**	(27)
Other investments	**45**	10
Other movements	**(3)**	(3)
Cash flow movement in net debt	**(768)**	70
Net debt[1] at the beginning of the year	**(1,986)**	(2,056)
Other non-cash movements	**(5)**	–
Net debt[1] at the end of the year	**(2,759)**	(1,986)
Represented by:		
Cash and cash equivalents and current investments	**541**	1,469
Less: restricted cash	**–**	(2)
Borrowings	**(3,300)**	(3,453)
Net debt[1] at the end of the year	**(2,759)**	(1,986)

1 APMs are used to assess the performance of the Group and are not defined or specified under IFRS. For further information on APMs, including justification for their use, please refer to the APMs section on page 184.

Summary

Net debt increased from $1,986 million at 31 December 2018 to $2,759 million at 31 December 2019 as Free Cash Flow from operations was more than offset by investment in the Group's growth projects. Cash consideration of $436 million was paid in respect of the Baimskaya copper project acquisition. Expansionary capital expenditure of $718 million was incurred, an increase of $188 million over the prior year, mainly on the Aktogay expansion project and the feasibility study and pioneer works at Baimskaya.

Free Cash Flow of $411 million reduced by $174 million from the prior year, as the increase in EBITDA was more than offset by higher working capital (see working capital section below) and sustaining capital expenditure. The increase in sustaining capital represents a normalisation of expenditure, as Aktogay and Bozshakol had benefited from lower maintenance requirements in prior years as the operations were newer.

Working capital

The summary of movements in working capital is outlined below:

$ million	2019	2018
Change in inventories[1]	**(128)**	(138)
Change in prepayments and other current assets[2]	**(72)**	(30)
Change in trade and other receivables	**(51)**	4
Change in trade and other payables and provisions[3]	**(31)**	49
Movement in working capital	**(282)**	(115)

1 The $161 million increase in inventory shown in the IFRS based cash flow statement (see note 31) includes MET and depreciation, which are excluded from the cash flow above as MET paid is reflected separately and EBITDA is stated before depreciation and amortisation.
2 The $113 million increase in prepayments and other current assets shown in the IFRS based cash flow statement (see note 31) includes net VAT paid on the major growth projects. The cash flow above contains net VAT (paid)/received associated with major growth projects as a separate line item.
3 The difference to trade and other payables shown in the IFRS based cash flow statement (see note 31) is the change in MET and royalties payable during 2019. The cash flow above contains MET and royalties paid as a separate line item.

The cash impact of inventory changes in 2019 was $128 million (2018: $138 million), largely due to the acquisition of consumables and spare parts to support the Aktogay and Bozshakol operations. The Group's priority for 2019 was to ensure that the main sulphide concentrators at these sites operated at full design capacity throughout the year, hence a conservative approach to the stocking of such items was taken. It is expected that over time inventory requirements will reduce as the Group develops better data on consumption and wear rates, works with suppliers to shorten lead times and as the Group's shared spares strategy develops further. An outflow of $44 million in respect of ore stockpiles and work-in-progress at Aktogay and Bozshakol was also included in change in inventories, mainly related to the stockpiling of low-grade sulphide ore at Aktogay (to access high grade areas and in preparation for the Aktogay expansion) and clay ore at Bozshakol. From 2020 it is expected that the amount of clay ore processed at Bozshakol from stockpiles will exceed mined volumes.

Prepayments and other current assets rose by $72 million (2018: $30 million) mainly due to an increase in VAT receivable at the Aktogay, Bozshakol and East Region operations. There was also an increase in VAT receivable relating to major growth projects of $41 million (2018: decrease of $3 million) which is shown separately in the table above and excluded from Free Cash Flow (see APMs section on page 184). The increase in VAT receivable was partly due to higher capital expenditure but was mainly the result of a delay in the receipt of VAT refunds in the second half of 2019. VAT is being received in 2020 through a combination of offset and refund.

Trade and other receivables increased by $51 million (2018: decreased by $4 million) which reflects the timing of sales and cash receipts. In addition, provisionally priced trade receivables are marked to market at year end contributing a $19 million increase at 31 December 2019 compared with the prior year due to higher forward prices. The Group's higher sales volumes in 2019 have also resulted in an increase in the normal level of trade receivables. Further details relating to the nature of the Group's customers are given in note 4(b) to the consolidated financial statements.

Trade and other payables and provisions decreased by $31 million (2018: $49 million increase) due to a reduction in customer receipts in advance of product deliveries compared to 31 December 2018. At the end of 2018, the Group had received advance payment for the dispatch of copper concentrate to European markets which was subsequently recognised as revenue in 2019.

Interest cash flows

Interest paid of $230 million was consistent with the prior year. Interest paid is higher than total interest incurred during the year of $226 million, which led to a reduction in the interest payable from $71 million at 31 December 2018 to $61 million at 31 December 2019.

Income taxes and MET

Income tax payments decreased to $92 million (2018: $95 million) despite the higher profit before tax generated, as $11 million of income tax payments due were offset against VAT refunds in the second half of 2019. Income tax payments were also below the income statement charge of $155 million (2018: $132 million) due to capital allowances and utilisation of available tax losses.

MET and royalties payments of $206 million were consistent with the prior year (2018: $208 million). At 31 December 2019, MET and royalties payable was $56 million compared with $48 million at 31 December 2018 following the increase in total MET and royalties incurred.

Capital expenditure

Sustaining capital expenditure increased to $142 million in 2019 from $85 million in the prior year, primarily due to higher maintenance spend at Aktogay and Bozshakol.

Expansionary and new project expenditure of $718 million in 2019 primarily relates to the Aktogay expansion project ($459 million). The first Aktogay and Bozshakol projects also incurred expenditure of $50 million and $37 million respectively, mainly for final retention payments, and the heap leach pad expansion at Aktogay. Following the acquisition of Baimskaya, the Group invested $111 million in the feasibility study and initial pioneer works. In addition, there was capital investment at East Region and Bozymchak of $56 million, mainly relating to the Artemyevsky expansion, and $5 million for the Koksay project. Please refer to the Operating review for an analysis of the Group's capital expenditure by operating segment.

Acquisition of the Baimskaya copper project

On 22 January 2019, the Group announced the Initial Completion of the acquisition of the Baimskaya copper project in the Chukotka region of Russia. The consideration due at Initial Completion was $675 million made up of $436 million in cash and 22.3 million new KAZ Minerals shares valued at $239 million, which were allotted to the Vendor. The Initial Cash Consideration of $436 million was settled during the first half of 2019, partly offset by $1 million of cash and cash equivalents on acquisition (see note 5(a) on page 142).

The 22.3 million shares are subject to a three-year lock-up period ending on the third anniversary of Initial Completion. Deferred Consideration of $225 million for the remaining interest is payable in 21.0 million shares, subject to the achievement of certain Project Delivery Conditions, including a pre-determined level of throughput and development of infrastructure by the Russian state. To the extent these conditions are not met or waived by the Group and therefore not settled in shares, the Deferred Consideration will become payable in cash on 31 March 2029.

The Initial Consideration of 22.3 million KAZ Minerals PLC shares valued at $239 million has been recognised as an increase in share capital of around $6 million and share premium of $233 million. The Deferred Consideration of $225 million has also been included within equity (see note 24(c)(iii) on page 152), representing the Group's ability to settle this amount through the issue of 21.0 million shares.

The total consideration for the acquisition was $900 million, of which around $880 million has been reflected as a mining licence within mining assets, $13 million in net deferred tax assets and $7 million relating to other non-current assets, income taxes prepaid and cash and cash equivalents (see note 5(a) on page 142).

Other investments

In 2019, other investing cash flows relate to the receipt of the remaining $45 million consideration in respect of NFC's equity investment in Koksay for $70 million, as announced in June 2018 (see note 5(b) on page 143). In 2018, other investing cash flows included the receipt of $25 million advance consideration in respect of NFC's equity investment in Koksay and $15 million of advances paid to fund studies on the Baimskaya copper project.

Movements in equity

Equity attributable to owners of the Company at 31 December 2019 was $2,115 million (2018: $1,050 million), with the increase of $1,065 million mainly due to Underlying Profit in 2019 of $571 million, the shares issued and Deferred Consideration for the Baimskaya acquisition of $464 million (see note 5(a) on page 142), partly offset by dividends paid of $47 million during 2019. There was also a $65 million increase in the US dollar value of the Group's foreign currency operations following a 1% increase in the value of the tenge from 31 December 2018 to 31 December 2019. The Group's mining assets are largely held within Kazakhstan-based entities which maintain the tenge as their functional currency. At the year end, non-monetary net assets are consolidated and reported in US dollars at the closing exchange rate with the change in value arising from movements in the tenge exchange rate reflected in equity and not through the income statement. The Group's external liabilities, principally bank debt, are mainly US dollar denominated and are not affected by movements in the KZT/$ exchange rate.

Movements in borrowings

On 14 June 2019, the Group signed a new $600 million credit facility agreement with DBK relating to the Aktogay expansion project. The facility accrues interest at US$ LIBOR plus 3.90%, with the first repayment due in June 2022, followed by semi-annual repayments in May and November of each year from November 2022 until the final repayment in 2034. $315 million (net of arrangement fees) was drawn by 31 December 2019. The facility is guaranteed by KAZ Minerals PLC.

On 15 November 2019, the Group signed a new credit facility of up to $100 million with CAT. The facility accrues interest at a variable margin of between 3.00% and 4.50% above US$ LIBOR, dependent on the ratio of net debt to EBITDA which will be tested semi-annually. It is comprised of two sub-facilities of $40 million and $60 million secured against existing and new Caterpillar equipment. Quarterly repayments for the existing drawing will commence in December 2020 until final maturity in 2024. $72 million (net of arrangement fees) was drawn by 31 December 2019. The facility is guaranteed by KAZ Minerals PLC.

At 31 December 2019, borrowings (net of unamortised fees) were $3,300 million, a decrease of $153 million from 31 December 2018 as a result of the movements set out in the table below.

On 28 January 2020, the Group completed an amendment and extension of the PXF which includes an increase in facility commitments to $1.0 billion, an extension of the loan tenor and a reduction in the facility margin. The amendment represents a net increase of $700 million above the $300 million outstanding under the existing facility and the maturity profile is extended by 3.5 years, from June 2021 until December 2024 with two annual extension options which, if exercised, would extend final maturity of the facility to December 2025 or December 2026 respectively. The amended facility accrues interest at a variable margin of between 2.25% and 3.50% above US$ LIBOR (previously between 3.00% and 4.50% above US$ LIBOR), dependent on the ratio of net debt to EBITDA which will be tested semi-annually. Monthly repayments will commence in January 2021, with a final balloon repayment of one-third of the facility amount ($333 million) in December 2024, which will be amortised during 2025 and 2026 if the extension options are exercised. The Group expects to fully draw the facility in the first quarter of 2020.

Further details of the terms of the Group's borrowings are included in note 26 of the consolidated financial statements.

Going concern

The Group manages liquidity risk by maintaining adequate committed borrowing facilities and working capital funds. The Board monitors the net debt level and liquidity position of the Group taking into consideration the expected outlook of the Group's financial position, cash flows, future capital expenditure and debt service requirements.

The Board is satisfied that the Group's forecasts, taking into account reasonably possible downside scenarios, show that the Group has adequate liquidity to continue in operational existence for the foreseeable future. Accordingly, it is appropriate to adopt the going concern basis of accounting in the preparation of these consolidated financial statements.

Movements in borrowings

$ million	At 1 January 2019	Drawings[1]	Repayments	Other movements[2]	At 31 December 2019
CDB-Bozshakol and Bozymchak	1,345	–	(183)	3	1,165
CDB-Aktogay CNY facility	110	–	(12)	(1)	97
CDB-Aktogay USD facility	1,221	–	(107)	3	1,117
PXF facility	500	–	(200)	–	300
DBK-Aktogay facility	277	–	(43)	–	234
DBK-Aktogay expansion facility	–	315	–	–	315
CAT facility	–	72	–	–	72
Total	3,453	387	(545)	5	3,300

$ million	At 1 January 2018	Drawings[1]	Repayments	Other movements[2]	At 31 December 2018
CDB-Bozshakol and Bozymchak	1,524	–	(183)	4	1,345
CDB-Aktogay CNY facility	128	–	(12)	(6)	110
CDB-Aktogay USD facility	1,327	–	(107)	1	1,221
PXF facility	600	–	(100)	–	500
DBK-Aktogay facility	298	–	(22)	1	277
Total	3,877	–	(424)	–	3,453

1 Drawings are shown net of arrangement fees, which are netted off against borrowings in accordance with IFRS 9.
2 Other movements include non-cash amortisation of fees on borrowings and foreign exchange gains on the CDB-Aktogay CNY facility.

Taxation

Tax strategy and risk management

The Group is subject to taxation in the UK, Kazakhstan and the various foreign countries in which it operates. Tax legislation of the jurisdictions in which the Group operates differs and is subject to interpretation by management and the government authorities, and as such, creates a risk of non-compliance with specific tax requirements. Whilst the Directors believe that the Group is in substantial compliance with tax legislation and contractual terms entered into that relate to tax, the absence of established case history and the complexity and judgemental nature of tax legislation in certain jurisdictions result in additional risk for the Group. Specific areas of interpretation include the subsoil use taxation and the structuring of cross border transactions, particularly in respect of the application of transfer pricing policies.

Our Vision for Tax

The Group takes a responsible and transparent approach to the management and control of its tax affairs and related risks and has adopted a tax strategy that supports the delivery of its long-term business strategy. The tax strategy has been reviewed by the Audit Committee and approved by the Board. It is owned by the Group's Chief Financial Officer ('CFO'), who is supported by appropriately qualified employees in both the UK and other jurisdictions in which the Group operates. In line with our transparent approach, we have historically disclosed our Total Tax Contribution voluntarily, which together with the Report on Payments to Governments, can also be found on our website.

The Group's overall vision for tax is to ensure compliance with the applicable rules and regulations in the jurisdictions in which it operates whilst maximising shareholder value and be the leading natural resources company in Central Asia.

1. Tax governance & risk appetite:

The execution of our growth strategy is underpinned by solid governance structures and processes, to ensure transparency and to manage the Group's exposure to risk. The Group follows a risk based approach in the management of its taxes. This involves the regular review and update of its tax risk profile, including the identification of key risks that could affect the business. The Group's approach to risk management ensures that we have in place the appropriate processes and controls to identify, manage and monitor such risks.

Whilst there are no rigid levels of acceptable tax risk, the Group's risk management framework is reviewed by the Board and includes stated levels of acceptable risk given financial, social, reputational and other impacts. The key risks are identified as strategic, financial, compliance or operational, and in a tax context, the Group has a low risk appetite. The CFO regularly reviews the Group's key tax risks including those arising in the UK together with a review of the Senior Accounting Officer process, compliance and controls. The Group's material tax issues are reported periodically to the Audit Committee. With the assistance of external tax advisors, the Group monitors developing tax legislation and presents these developments with any significant tax-related issues to the Audit Committee at least twice a year.

2. Attitude towards tax planning:

The Group takes a responsible and transparent approach to the management and control of its tax affairs. Any business transaction undertaken will be in accordance with the Group's strategy and underpinned by commercial objectives. In order to deliver value for our shareholders whilst maintaining a strong social commitment to our employees, the environment and communities around us, we do not engage in aggressive tax planning that lacks commercial substance or may harm the Group's business operations, reputation or stakeholders. We seek external advice as required.

The Group's approach to intercompany transactions requires that these are conducted on an arm's length basis and comply with the transfer pricing rules in the jurisdictions in which the Group operates and are in line with the OECD principles. We seek to benefit from government sponsored reliefs and incentives, where appropriate. The Group may engage with external tax advisors where tax legislation is not clear or open to interpretation and to assist with tax compliance obligations in the jurisdictions in which we operate.

3. Relationship with HMRC:
We seek to build an equitable relationship through acting transparently and promoting dialogue with the tax authorities in the jurisdictions in which we operate. Management works closely with the tax authorities in the review of proposed amendments to legislation. Where any disputes arise with regard to the interpretation and application of tax legislation, the Group is committed to addressing and resolving the matters promptly with the relevant tax authorities in an open and constructive manner.

In the UK, the Group's approach to HMRC is consistent with the above, as we maintain an open, transparent and cordial relationship both with our Customer Relationship Manager and any other case officers we interact with. We continue to be proactive in our approach, and through regular interaction and dialogue, inform HMRC in advance of any relevant issues wherever practical. We may seek external support from our advisors to confirm the appropriateness of tax positions and interpretations to minimise potential areas of disagreement with the tax authorities.

4. Tax integrated into the business:
Given the organisational structure and collaborative working culture within the Group, the tax team has built close relationships with the wider business such that tax is appropriately considered as an integral part of a relevant transaction or business decision. Members of the tax and finance teams are appropriately qualified and provided with relevant training opportunities to fulfil their role effectively and the relationship with external advisors ensures real time support is available on specialist technical issues that may arise.

Our published Tax Strategy, approved by the Board, satisfies para 16(2), Schedule 19 of the UK Finance Act 2016 in respect of our financial year ending 31 December 2019.

Total tax contribution

The Group has prepared its total tax contribution in line with the requirements of 'The Reports on Payments to Government Regulations 2014' (the 'Regulation'). The Regulation's definition of Payments to Government includes fewer payment types, compared to the total tax contributions disclosed by the Company in prior years. As such, the Group has also disclosed other taxes paid such as property taxes, employer and employee payroll taxes, environmental taxes and customs and duties. The total tax contribution of the Group amounted to $412 million compared to $392 million in 2018.

Payments to Governments

The table includes the information in the format required to be disclosed under the Regulation. The report shows payments made in excess of £86,000 ($116,000) for activities related to the exploration, prospecting, discovery, development and extraction of minerals by project and by government type and by country, rounded to the nearest million. Where a payment relates to activities that are reportable under the Regulation, as well as to activities which are not reportable, the payment has been included in its entirety if it is not possible to disaggregate it. In addition to the disclosures required under the Regulation, the Group has presented payments made for other types of taxes in the same format to show its total contributions in the countries and regions in which it operates. Comparative information under the Regulation is not required and has not been presented.

For the year ended 31 December 2019, total payments to governments under the Regulation amounted to $326 million, while total tax contributions, which include tax payments not covered by the Regulation, amounted to $412 million and are contained in the table below.

Social payments represent payments made to bodies, associations, trusts, state-owned enterprises and other public interest groups located in the regions in which the Group operates and are shown by mining license where applicable. These payments include the transfer of assets at their book value, which the Group regards as social payments because they benefit the local communities.

Social payments of $22 million were made during 2019. Key projects supported included the construction of a cultural centre in Nur-Sultan city and the construction of sports facilities in Pavlodar and the East Region of Kazakhstan. Further details are set out in the Sustainability report on page 63.

Payments to Governments

$ million	Corporate income taxes	MET and royalties[1]	Withholding tax	Signature bonus and licence fee[2]	Social payments	Total payments to governments per Regulation	Employer's payroll taxes	Property taxes	Environmental taxes	Employees' payroll taxes	Customs and duties	Total
KAZAKHSTAN												
Artemyevsky – licence	–	14	–	–	–	14	1	–	–	2	–	17
Irtyshsky – licence	–	8	–	–	–	8	1	–	–	1	–	10
Orlovsky – licence	–	18	–	–	–	18	2	1	–	2	–	23
Legal entity	17	–	–	–	4	21	3	1	–	4	–	29
Total East Region	17	40	–	–	4	61	7	2	–	9	–	79
Aktogay licence and legal entity	30	90	10	1	11	142	3	4	2	6	9	166
Bozshakol licence and legal entity	21	71	12	–	6	110	3	5	4	5	4	131
Koksay licence and legal entity	–	–	–	–	–	–	–	–	–	–	–	–
Other legal entities	1	–	–	–	–	1	3	–	–	5	1	10
TOTAL	**69**	**201**	**22**	**1**	**21**	**314**	**16**	**11**	**6**	**25**	**14**	**386**
RECIPIENT												
State Revenue Committee	68	201	22	–	4	295	7	2	–	9	13	326
Local government[3]	1	–	–	1	17	19	9	9	6	16	1	60
TOTAL	**69**	**201**	**22**	**1**	**21**	**314**	**16**	**11**	**6**	**25**	**14**	**386**
KYRGYZSTAN												
Bozymchak licence and legal entity	–	8	3	–	–	11	2	–	–	2	–	15
RECIPIENT												
State Tax Administration (central government)	–	6	3	–	–	9	–	–	–	–	–	9
Local government	–	2	–	–	–	2	2	–	–	2	–	6
TOTAL	**–**	**8**	**3**	**–**	**–**	**11**	**2**	**–**	**–**	**2**	**–**	**15**
RUSSIA												
Baimskaya licence and legal entity	–	–	–	–	1	1	1	–	–	1	–	3
RECIPIENT												
Federal Tax Service	–	–	–	–	–	–	1	–	–	1	–	2
Local government	–	–	–	–	1	1	–	–	–	–	–	1
TOTAL	**–**	**–**	**–**	**–**	**1**	**1**	**1**	**–**	**–**	**1**	**–**	**3**
UNITED KINGDOM												
Legal entity paid to HMRC	–	–	–	–	–	–	2	–	–	6	–	8
Total Payments to Governments	**69**	**209**	**25**	**1**	**22**	**326**	**21**	**11**	**6**	**34**	**14**	**412**

1 MET is payable in Kazakhstan on the value of the mineral resources extracted based on the average price of the minerals on the LME or LBMA. MET includes taxes paid on water extraction.
2 Payments made as required under subsoil use licences.
3 Local government in Kazakhstan includes bodies, associations, trusts, state-owned enterprises and other public interest groups.

DELIVERING SUSTAINABLE GROWTH IN COPPER

"KAZ Minerals has demonstrated material improvements in its sustainability performance in 2019 and gained entry to the FTSE4Good Index Series"

KAZ Minerals is a responsible developer and operator of mining assets in Kazakhstan, Russia and Kyrgyzstan. Social and environmental sustainability is at the core of our strategy and licence to operate.

Our approach to sustainability

KAZ Minerals is a responsible developer and operator of mining assets in Kazakhstan, Russia and Kyrgyzstan. The production of copper is essential for the continued growth and modernisation of the world's developing economies and for facilitating the global transition to low carbon energy generation and low emissions transport technologies, which are highly copper intensive. Given the importance of copper for current and future technologies, our strategy to grow by investing in the development of large scale, low cost mining projects serves a clear purpose for wider society.

In addition to providing the copper that the world needs to grow and reduce its CO_2 emissions, we seek to minimise or eliminate any potentially negative impacts of our activities.

Our stakeholders include our employees, local communities, governments and investors. They expect us to develop mineral wealth for the longer term benefit of wider society and not to focus solely on short-term financial returns. We must provide our employees and contractors with a safe working environment and minimise the impact of our activities on the surrounding environment and local communities.

In 2019 KAZ Minerals has demonstrated material improvements in its sustainability performance and this progress has been recognised by independent Environmental, Social and Governance ("ESG") research providers. We are pleased to report that in December 2019, KAZ Minerals gained entry to the FTSE4Good Index series. The FTSE4Good Index Series is designed to measure the performance of companies demonstrating strong ESG practices and is used by a wide variety of market participants to create and assess responsible investment funds and other products.

As we implement our growth strategy we are carefully managing the environmental and social impacts of our activities and we will continue to do so when executing our current and future mining projects at Aktogay and Baimskaya.

Oleg Novachuk
Chair

National context and economic contribution

KAZ Minerals is a copper producer with mining operations in Kazakhstan and Kyrgyzstan. The Group acquired the Baimskaya copper project in January 2019, a major greenfield asset in Russia which it intends to develop into a large scale, open pit copper mine by 2026.

In Kazakhstan the Group operates the Aktogay and Bozshakol mines and concentrators, as well as three underground mines and associated concentrators in the East Region, employing approximately 16,000 staff. In 2019 the Group exported 138 kt of copper cathode from Kazakhstan to customers in Asia and Europe (2018: 106 kt) and 179 kt of payable copper in concentrate, mainly to China (2018: 190 kt). The Group generated revenues of $2,266 million in 2019 and made a total tax contribution of $386 million in Kazakhstan, including $201 million of MET and $94 million of corporate income and withholding taxes.

The Group employs approximately 1,000 staff in Kyrgyzstan where it operates the Bozymchak copper-gold mine. Tax payments of $15 million were made in Kyrgyzstan by Bozymchak in 2019.

The Group has invested a total of $4.7 billion in the construction of new mining facilities in Kazakhstan from 2011 to 2019 at its Aktogay and Bozshakol sites. A further $540 million is planned to be invested in the partially completed Aktogay expansion project over 2020 and 2021. The capital budget for the new Baimskaya copper project in Russia is currently estimated at around $5.5 billion over the seven year construction period and will be confirmed and updated on completion of the bankable feasibility study. The new mining facilities in Kazakhstan make material financial and tax contributions as well as creating employment for around 3,900 employees and 2,600 construction contractors, and valuable training opportunities for locally recruited apprentices.

Economic value generated and distributed

$ million	2019	2018
Direct economic value generated		
Revenues	2,266	2,162
Economic value distributed		
Operating cash costs[1]	670	659
Employee wages and benefits[2]	219	184
Payments to providers of capital[3]	277	256
Taxes paid[4]		
Kazakhstan	324	321
Kyrgyzstan	11	9
Russia	–	–
United Kingdom	–	3
Community investments[5]	22	9
Economic value retained	743	721

1 Operating cash costs as disclosed in the Financial review (page 41), being the difference between revenues and EBITDA adjusted to exclude total employee costs (see note 9 to the financial statements) and social spend, which are shown separately in the table above.
2 Employee wages and benefits are the Group's total labour costs and associated social taxes (see note 9 to the financial statements).
3 Payments to providers of capital represents interest paid on borrowing facilities and dividends to shareholders during the period (see consolidated statement of cash flows on page 130).
4 Taxes paid for each region is reflected in the payments to governments table on page 49 (see Financial review) and is the total taxes paid adjusted to remove employee and employers' payroll taxes, which are reflected within employee wages and benefits for each region and excludes social spend, reflected as community investments.
5 Community investments represents the social payments as reflected in the payments to government table on page 49.

Health and safety

Fatalities

We are disappointed to report that two fatalities occurred at our underground operations in the East Region of Kazakhstan in 2019. Both incidents were underground with one occurring at Orlovsky and the second at Artemyevsky. A further fatality occurred close to the mine entrance at Artemyevsky in January 2020, following a localised avalanche.

KAZ Minerals believes that all fatalities are avoidable and preventable. After any fatal incident, operations in the affected area are suspended and senior management attend the site within a short period of the incident occurring. All fatalities are investigated by state authorities. Once this process is completed the Group conducts its own detailed investigation to establish root causes and identify any procedural or other changes required to prevent recurrence of similar incidents.

The incidence of fatalities at the Group's operations has been on a long-term downward trend. Open pit mining is inherently safer than underground mining and the Group's safety performance has improved as these new operations have grown to account for the bulk of the Group's activities. No fatalities have occurred at any of the Bozshakol, Aktogay and Bozymchak mines since these mines commenced production, covering a total of 53 million man hours.

Injuries

The Group reports its health and safety performance according to the occupational injury and disease classification definitions published in January 2014 by the ICMM.

The average TRIFR for ICMM members in 2018 was 3.41 (2017: 3.94). The reporting of minor injuries and near misses, with a focus on potential high-risk incidents, is an important management tool for improving health and safety performance. Under ICMM definitions, all injuries including minor injuries requiring treatment beyond first aid or resulting in the worker's inability to perform his or her routine work function on the next calendar day, are recordable injuries.

There were 63 TRI cases in 2019, an increase of 3% compared with the 61 injuries recorded in 2018. However, the number of hours worked increased by 31% in 2019 to 45.8 million (2018: 35.0 million), mainly due to 11.9 million hours worked at the Aktogay expansion project. The increase in hours worked resulted in a 21% decrease in TRIFR, to 1.38 (2018: 1.74). The reduction in TRIFR was achieved despite construction project work being generally considered more dangerous than open pit mining operations. This is due to the increased time spent carrying out high-risk activities such as working at height, hot works and other construction related hazards in a work environment which is constantly changing.

The main causes of injuries during 2019 were slips and falls (23) and rock falls (12). There were 23 serious injuries out of a total of 63 recordable injuries, compared with 18 serious injuries in 2018. The main causes of serious injury were rock falls (seven) and slips and falls (nine).

Safety improvement initiatives

In 2019 the Group launched a comprehensive new health and safety initiative, 'Goal Zero' aimed at reducing health, safety and environmental incidents to zero. KAZ Minerals is committed to implementing further improvements to its robust safety management systems, training and risk management processes to achieve the ambitions of the Goal Zero initiative.

In 2020, one of the priorities for Goal Zero is to establish an integrated risk management system, from high level baseline assessments, through to the Group's existing individual risk assessment tool.

The risk assessment process aims to reduce or eliminate risks before a work task is commenced by encouraging employees to proactively assess workplace safety and take necessary measures before proceeding with any task.

An enhanced risk assessment process, specifically modified for effective identification and escalation of hazardous ground conditions which could result in rock falls, is being implemented in the Group's underground operations in 2020.

Occupational health

There were 58 new cases of occupational diseases recorded in 2019 (2018: 54). The majority of new cases in 2019 resulted from musculoskeletal disorders, neuropathic pain, silicosis and dust bronchitis.

Occupational health problems are usually the result of long-term exposure to risks such as poor ergonomics, vibration, dust or noise. The Group has measures in place to remove or reduce these risk factors where possible, for example by limiting the time that employees spend in roles which expose them to occupational health risk factors. Annual medical checks are conducted to ensure timely identification of emerging occupational health conditions.

In 2019, the Group started a new initiative to improve overall employee wellbeing, including the important area of mental wellbeing, in particular for its staff based in remote sites such as Aktogay and Bozshakol. The programme is preventative in nature but also includes services to treat mental health disorders if they occur, and there is now a clinical psychologist available with dedicated facilities at these locations.

The open pit mines at Aktogay, Bozshakol and Bozymchak reported no serious occupational health issues during 2019.

TO FIND OUT MORE ABOUT THE GOAL ZERO PROGRAMME, PLEASE VISIT OUR WEBSITE.

www.kazminerals.com

Environmental impacts

KAZ Minerals seeks to minimise the impact of its activities on the environment and to increase environmental awareness amongst its employees, contractors and suppliers.

The Group has an environmental policy which sets out its commitment to environmental protection, reduction of emissions and waste and efficient consumption of resources such as energy and water. The policy can be downloaded from the Group's website, www.kazminerals.com.

The Group conducts detailed environmental due diligence prior to the development of new mining projects and continually monitors the impact of its activities on the environment, publishing key performance indicators annually. Where possible, the Group aligns its environmental reporting with GRI Standards which is a set of sustainability reporting standards published by the Global Reporting Initiative ('GRI'). GRI is an independent organisation established in 1997 to create common standards for sustainability reporting by companies and governments.

The Health, Safety and Sustainability ('HSS') Committee is a Board Committee which is responsible for oversight of the Group's environmental policies, reporting, standards and compliance. The Committee was previously known as the Health, Safety and Environment Committee and was renamed in 2020 to reflect our commitment to sustainability. Senior management are responsible for the Group's overall environmental performance. For more details on the HSS Committee, please see the HSS Committee section in the Governance framework on page 95 of this report.

Energy use

The Group's energy efficiency, measured as energy use per tonne of ore processed, has continued to improve in 2019 as the Aktogay and Bozshakol open pit mines achieved design ore throughput over the year. The main drivers of the energy efficiency of the new assets are gained from the use of large scale processing facilities, the modern grinding and flotation technology employed in the concentrators and the low strip ratios of the Aktogay and Bozshakol deposits, where low quantities of waste rock are required to be removed per tonne of copper ore extracted.

Energy use by type (PJ)	2019	2018
Electricity	**9.20**	8.63
Diesel	**2.08**	1.74
Heat	**1.20**	1.27
Coal	**0.00**	0.00
Petrol	**0.06**	0.06
Total	**12.54**	11.70
Energy intensity[1]	**0.21**	0.22

Energy use by asset (PJ)	2019	2018
Aktogay	**4.81**	3.98
Bozshakol	**4.31**	4.09
East Region	**3.10**	3.28
Bozymchak	**0.32**	0.35
Total	**12.54**	11.70
Energy intensity[1]	**0.21**	0.22

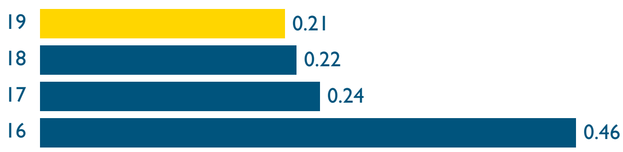
1 TJ/kt sulphide ore processed.

Total energy use increased by 7% in 2019 compared with the prior year, mainly reflecting the increase in ore processing volumes which grew by 10% as Aktogay and Bozshakol ramped up towards their design ore throughput capacities. Energy use at East Region and Bozymchak reduced to 3.42 PJ (2018: 3.63 PJ) due to a reduction in the quantity of ore processed. Whilst overall energy consumption increased, the energy intensity of the Group's activities reduced to 0.21 TJ per kt of ore processed (2018: 0.22).

Electricity consumption (PJ)	2019	2018
Aktogay	**4.06**	3.47
Bozshakol	**3.44**	3.34
East Region	**1.54**	1.64
Bozymchak	**0.16**	0.17
Total	**9.20**	8.62
Electricity intensity[1]	**0.16**	0.16

1 TJ/kt sulphide ore processed.

TJ/kt sulphide ore processed (energy consumption)



Baimskaya 110kv construction power line and substation


Bozshakol haul truck

Electricity consumption at Bozshakol and Aktogay increased by 10% in 2019 to 7.50 PJ (2018: 6.81 PJ), reflecting the ramp up of sulphide and clay ore processing volumes, which increased by 10% from 53,250 kt in 2018 to 58,491 kt in 2019 across the Group. In the East Region and Bozymchak, electricity consumption reduced to 1.70 PJ (2018: 1.81 PJ) in line with the reduced processing volumes.

Diesel consumption (PJ)	2019	2018
Aktogay	0.76	0.52
Bozshakol	0.87	0.75
East Region	0.30	0.32
Bozymchak	0.15	0.15
Group	2.08	1.74
Diesel intensity[1]	**0.022**	**0.023**

1 TJ/kt ore mined.

Diesel consumption increased by 20% to 2.08 PJ (2018: 1.74 PJ) mainly driven by additional extraction of low grade ore at Aktogay to access high grade material and develop the pit in preparation for the Aktogay expansion project. Diesel consumption also increased at Bozshakol as ore extraction increased by 16% due to mining of surplus volumes of clay ore.

The Group constantly seeks to improve the efficiency of its haul truck fleet, the main source of diesel consumption. Fleet movements at Aktogay and Bozshakol are monitored in real time using an automated remote dispatch system to minimise diesel consumption. An optimisation plan is being implemented in 2020 to increase the efficiency of the fleet further. Aktogay and Bozshakol benefit from close proximity to pre-existing rail infrastructure that is used to transport copper concentrate to customers, eliminating the need to transport concentrate using diesel powered trucks.

CO_2 emissions

CO_2 emissions by type (kt)	2019	2018
Scope 1	443	431
Scope 2	2,322	2,170
Group	2,765	2,601
Copper production	311.4	294.7
CO_2 per unit of copper	8.9	8.8
Ore processed	58,491	53,250
CO_2 per unit of ore processed	**0.047**	**0.049**

TO FIND OUT MORE ABOUT OUR ENVIRONMENTAL IMPACTS, PLEASE VISIT OUR WEBSITE.

www.kazminerals.com

CO_2 per unit of ore processed in 2019 was 4% lower at 0.047, from 0.049 in the prior year. CO_2 emissions per tonne of copper produced increased slightly to 8.9 tonnes (2018: 8.8 tonnes), due to the expected reduction in average copper grades in ore processed during the year.

Absolute CO_2 emissions have increased as the Group has grown its production, rising by 6% to 2,765,229 tonnes (2018: 2,601,060 tonnes). The increase was mainly due to higher ore extraction and processing volumes at Aktogay, which operated at design capacity over 2019 and delivered a record 146 kt of copper production.

Scope 1 emissions mainly relate to mining activities at Aktogay and Bozshakol, and heat energy consumption in the East Region. Scope 1 emissions increased slightly in 2019 as haul truck journeys lengthened and additional quantities of low grade ore were extracted at Aktogay to access high grade ore for processing and to develop the pit ahead of the Aktogay expansion project.

Scope 2 emissions increased by 7% to 2,321,792 tonnes (2018: 2,169,985 tonnes) mainly due to higher electricity consumption at the Aktogay and Bozshakol concentrators, where combined processing volumes increased by 11%.

CO_2 intensity, t per $ million revenue	2019	2018
Revenue ($m)	**2,266**	2,162
Total CO_2 emissions (Scope 1, Scope 2, kt)	**2,765**	2,601
CO_2 emissions, t per $ million revenue	**1,220**	1,203

The Group's CO_2 intensity by revenue in 2019, as measured by the Carbon Disclosure Project (tonnes of CO_2 per $1 million of revenue), is 1% higher than the prior year at 1,220 tonnes (2018: 1,203 tonnes), as the 8% reduction in average copper prices during the year to $6,000 /t (2018: $6,526 /t) was only partially offset by a 6% growth in copper production.

TCFD disclosure table

KAZ Minerals supports the work of the Task Force on Climate-Related Financial Disclosures which requires companies to set out how their strategy and risk assessment processes align with the challenges and opportunities presented by climate change.

	Annual Report 2019	Website	CDP survey response
Governance			
Describe the board's oversight of climate-related risks and opportunities.	Pages 69, 78, 82, 83, 85, 95, 96	kazminerals.com/esg/environment/climate-change/TCFD	2018 CDP Climate Change questionnaire response, C1.1a; C1.1b
Describe management's role in assessing and managing risks and opportunities.	Page 56	kazminerals.com/esg/environment/climate-change/TCFD	2018 CDP Climate Change questionnaire response, Question C1.2a
Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Pages 2-9, 12, 69	kazminerals.com/esg/environment/climate-change/TCFD	2018 CDP Climate Change questionnaire response, C2.3a
Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning.	Pages 12, 69	kazminerals.com/esg/environment/climate-change/TCFD	2018 CDP Climate Change questionnaire response, 2.3a
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	–	–	2018 CDP Climate Change questionnaire response, 2.4a
Risk Management			
Describe the organisation's processes for identifying and assessing climate-related risks.	Page 67	kazminerals.com/esg/environment/climate-change/TCFD	2018 CDP Climate Change questionnaire response, C2.2b
Describe the organisation's processes for managing climate-related risks.	Page 69	kazminerals.com/esg/environment/climate-change/TCFD	2018 CDP Climate Change questionnaire response, C2.2a
Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management.	Page 67	kazminerals.com/esg/environment/climate-change/TCFD	2019 CDP Climate Change questionnaire response, C3.1c
Metrics and Targets			
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk-management process.	Pages 54-56, 58	kazminerals.com/esg/environment/climate-change/TCFD	–
Disclose Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	Page 54-56	kazminerals.com/esg/environment/climate-change/TCFD	–
Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	Pages 56, 58	kazminerals.com/esg/environment/climate-change/TCFD	–

Reducing CO_2 emissions intensity

The Group is committed to minimising the CO_2 intensity of its operations as stated in its Environmental Policy. The Group HSS Committee is responsible for the monitoring of CO_2 intensity. The operations' General Directors are responsible for implementing efficiency initiatives to minimise energy consumption at site level.

Reductions in CO_2 intensity have been achieved through the transition to modern open pit mining. In the longer term, the Group will seek to increase the use of renewable energy sources where possible. During 2019 the Group acquired the Baimskaya copper project in Chukotka, Russia. During the construction period and when in operation, Baimskaya is expected to draw power from low carbon or carbon free sources, including nuclear and hydropower. The only significant CO_2 emissions will arise from the use of diesel fuel in mining activities or for heating, and the transportation of copper concentrate to customers. The delivery of Baimskaya is likely to significantly reduce the CO_2 intensity of the Group's operations once the project is completed and ramping up production.

The Government of Kazakhstan, where the majority of the Group's assets are currently located, is committed to increasing electricity generation from renewable sources as part of its national development strategy, with a target of 30% of power generation by 2030 and 50% by 2050.

The Group has established a CO_2 emissions intensity reduction target to achieve a 5% reduction in CO_2 emissions per unit of sulphide ore processed by the end of 2024.

TO FIND OUT MORE ABOUT ENERGY CONSUMPTION, CO_2 EMISSIONS AND OTHER EMISSIONS TO AIR, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

Waste

The Group is committed to the responsible management of mineral waste and other waste products, as set out in its Environmental Policy. The Group HSS Committee is responsible for monitoring waste management. The operations' General Directors are responsible for waste management at site level.

Waste rock by asset (Mt)	2019	2018
Aktogay	3.3	0.5
Bozshakol	6.3	6.4
East Region	0.1	0.1
Bozymchak	3.9	7.8
Group	13.6	14.8
Waste intensity[1]	**43.7**	**50.2**

1 kt/kt copper production.

The Group generates waste rock from the mining of overburden, mainly at Aktogay, Bozshakol and Bozymchak. Waste rock output at Aktogay and Bozshakol is not considered to be a significant stakeholder issue due to the remote locations of the mines, the low strip ratios of these mines and their distances from local communities. Waste rock mining decreased by 8% in 2019 to 13.6 Mt (2018: 14.8 Mt) due to higher stripping activity at Bozymchak in 2018.

Tailings by asset (Mt)	2019	2018
Aktogay	24.7	20.2
Bozshakol	28.9	28.0
East Region	2.3	2.6
Bozymchak	1.0	1.0
Group	56.9	51.8
Tailings intensity[2]	**183**	**176**

2 kt/kt copper production.

TO FIND OUT MORE ABOUT TAILINGS MANAGEMENT AT KAZ MINERALS, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

Tailings waste generation increased in line with processing volumes, driven by higher throughput at Aktogay during the year.

The safe and effective management of tailings waste is a high priority for the Group. Operating procedures are in place for the monitoring and maintenance of tailings storage facilities. The Group periodically arranges for inspections by independent external experts, with all active tailings storage facilities inspected during 2019. The Group is required to comply with the laws of the Government of Kazakhstan and the Government of Kyrgyzstan in relation to the licensing, upkeep and maintenance of tailings storage facilities. State authorities regularly inspect the Group's tailings facilities to ensure compliance with regulations. There are no significant deficiencies identified in the stability of the Group's tailings storage facilities. Ongoing work programmes, supported by appropriate external consultants, are in place to develop the tailings dams in line with future production plans and to address any issues identified.

Water

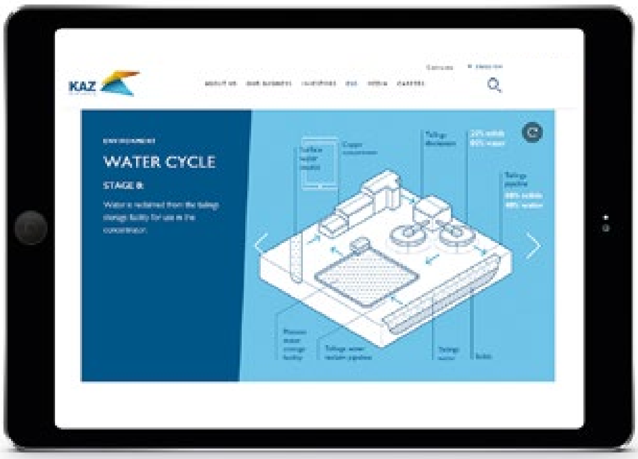
The Group is committed to reducing its water consumption where possible, as set out in its Environmental Policy. The Group HSS Committee is responsible for monitoring water use. The operations' General Directors are responsible for implementing efficiency initiatives to minimise water consumption at site level.

Sources of water for use in new mining projects are considered in detail prior to commencement of construction and this analysis forms an integral part of any scoping or feasibility study. The KAZ Minerals projects division, together with senior management and the Board, consider the availability of fresh water for copper processing and any likely adverse effect on local communities or the surrounding environment before approving a new development project.

The Group is currently conducting a feasibility study for the Baimskaya copper project in the Chukotka region of Russia, which includes a detailed assessment of the availability of sufficient supplies of water. An initial environmental impact study has been conducted by an independent consultant which indicates that groundwater sources are available close to the mine site and there are not expected to be any adverse effects for local communities or other material impacts on the environment resulting from the extraction of fresh water for copper processing.

All of KAZ Minerals' existing mining and processing sites benefit from access to sufficient fresh water and none of the Group's operations are located in water stressed areas. The Group seeks to conserve and recycle as much water as possible, with the main sources of reusable water being from tailings and mine water inflow. The Aktogay, Bozshakol and Baimskaya sulphide concentrators are expected to recycle over 75% of water used.

Water withdrawal by asset (megalitres)	2019	2018
Bozshakol	**6,543**	22,659
Aktogay	**14,390**	12,075
East Region	**8,525**	7,866
Bozymchak	**421**	304
Group	**29,879**	42,904



TO FIND OUT MORE ABOUT THE WATER RECYCLING PROCESS AT OUR BOZSHAKOL AND AKTOGAY SITES, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

Water withdrawal across the Group decreased by 30% in 2019 as the Bozshakol clay plant was closed for around three months in the first half of the year during upgrade works. Following the closure, the clay plant benefited from improvements made to the process water and reclaim systems which have significantly reduced its consumption of fresh water and increased recycling of water from tailings.

Water consumption at Aktogay increased in line with ore throughput at the sulphide concentrator during 2019, to 14,390 megalitres (2018: 12,075 megalitres).

Water intensity by asset (m^3 per t ore processed)	2019	2018
Bozshakol	**0.22**	0.80
Aktogay	**0.32**	0.33
East Region	**3.08**	2.60
Bozymchak	**0.41**	0.30
Group	**0.38**	0.62

The water intensity of the Group's operations measured as cubic metres per tonne of ore processed also decreased significantly in 2019 due to the works undertaken at the Bozshakol clay plant, falling to 0.38 m^3/t (2018: 0.62 m^3/t).

Water withdrawal by source (megalitres)	2019	2018
Surface water	**9,975**	25,993
Groundwater	**19,904**	16,911
Group	**29,879**	42,904

Total water extraction of 29,879 megalitres consisted of 9,975 megalitres extracted from surface water sources including rivers or municipal water supplies and 19,904 megalitres extracted from groundwater wells. The increase in water extracted from groundwater wells was due to increased processing volumes at Aktogay in 2019, where water is drawn primarily from groundwater sources.

The decrease in surface water consumption is due to the increased water recycling rate at Bozshakol where surface water is sourced from the Satpayev canal system, following upgrade works at the clay plant.

The total discharge of water back into the environment in 2019 increased to 1,478 megalitres (2018: 1,031 megalitres). Discharge of water took place at three locations in the East Region. Two of these locations are at underground mining operations which are situated large distances from the processing plants, making it uneconomic to pump the water back for reuse. The third discharge occurs at waste rock dumps adjacent to a retired open pit mine, where acidic drainage water is collected. At each of these locations, water inflow and discharge volumes vary dependent on local precipitation. All discharge water is monitored and treated prior to release to the environment.

The Group has established a target for a 5% reduction in its water consumption intensity per unit of ore processed by the end of 2024.

Sustainability targets

The Group has established targets to improve its performance across four key sustainability metrics, to be achieved over the next five years ending 31 December 2024 (base year 2018):

1. Health and safety – eliminate occupational fatalities
2. CO_2 emissions per unit of sulphide ore processed – reduce by 5%
3. Water consumption per unit of sulphide ore processed – reduce by 5%
4. Social – maintain social spending at or above $15 million per annum, subject to identifying suitable projects which meet the Group's social investment criteria

The Group intends to grow its output of copper during the period over which the targets are set and this is likely to lead to an absolute increase in CO_2 emissions and water consumption. To properly reflect efficiency gains from operational improvements made in the coming five-year period, the Group has adopted intensity targets for its CO_2 emissions and water consumption.

goalzero
Incident & Injury free

Mine closure

The Group is committed to rehabilitating mining sites after closure, as is required by law in Kazakhstan and Kyrgyzstan. The operations' General Directors are responsible for the Group's compliance with closure and rehabilitation obligations. The Group periodically reviews and updates closure plans for each of its sites, including calculating the likely costs associated with closure. Provision is made to cover the costs of closure and rehabilitation and amounted to $74 million at 31 December 2019. More information can be found in note 28 to the financial statements on page 156 of this document. The provision represents the discounted values of the estimated costs to decommission and reclaim the mines based on the current estimated life of mine of each deposit.

In December 2016, mining operations at Yubileyno-Snegirikhinsky ceased as mineral resources at the mine were fully exploited. A closure plan was designed and agreed with the local authorities. Under the rehabilitation programme, the majority of surface buildings such as accommodation blocks, offices, and associated utilities were transferred to the local government authorities to be re-purposed for use by small and medium sized businesses.

In October 2019, the closure process for the Yubileyno-Snegirikhinsky mine was completed and the Kazakhstan Regional Environmental Commission approved the closure of the mine. The overall strategy for the site is forestry reclamation, to restore the landscape to its original condition.

TO FIND OUT MORE ABOUT THE YUBILEYNO-SNEGIRIKHINSKY CLOSURE AND REHABILITATION, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

Environmental permitting and compliance

Environmental permits are granted for the Group's operations, setting annual limits for emissions, water use and water discharge. If levels exceed these limits, charges are applied in proportion to the amount of emissions or usage in excess of the limits. The Group reports the total charges paid and any material environmental incidents (with materiality determined by their nature or resulting in a fine in excess of $100,000) in this report and in the ESG section of its website.

The Group paid environmental and emissions charges of approximately $190,000 in 2019 (2018: less than $1,000). The majority of payments were administrative in nature and are not considered to be fines for breaches of regulations. Excess emissions charges are not related to any potential risk to the environment or the safe operation of our tailings facilities or other environmental management systems.

There were no material environmental incidents likely to lead to harm to the environment. One payment of approximately $150,000 was made in 2019, for failure to renew a permit on a timely basis in the East Region in 2017, and is considered to be administrative in nature.

No other environmental payment exceeded the Group's quantitative materiality threshold of $100,000 during the year.

TO FIND OUT MORE ABOUT ENVIRONMENTAL PERMITTING AND COMPLIANCE, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

Employees

The Group seeks to attract and retain skilled staff by offering safe working conditions, fair remuneration in line with market rates of pay and social benefits packages for its employees and their families.

Policies and due diligence

The Group has in place a number of policies governing its relationship with employees, including the Code of Fair Employment, and the Diversity and Equality policy. The Group periodically reviews the terms and conditions of employment in its own operations to confirm that the Code of Fair Employment is being fully applied within the Group. Due diligence is conducted on potential recruits prior to their employment in the Group.

Consultation and communication

Several communication channels are open to employees to make their views known to senior management and to the Board. The first point of contact is with an employee's line manager and in most cases this is sufficient for addressing employee concerns. There is a 'Direct Line' event held every year in which the Chair of the Group answers questions from employees on a live video feed. The Deputy Chair and Senior Independent Director, Michael Lynch-Bell, is the Designated non-executive Director for the workforce, responsible for liaising with employees and representatives of labour unions. Each of the Group's operational divisions has a Head of Employee Relations whose role is to act as a liaison between employees and management. General Directors hold quarterly 'town hall' meetings.

Outside of operational or human resources related enquiries, all employees have access to a confidential telephone reporting line (Speak Up) which can be used to raise ethical concerns, for example any concerns related to bribery or corruption. The Audit Committee receives a regular update on issues raised using the Speak Up service and conducts further investigation, where deemed necessary.

KAZ Minerals respects the right to freedom of association and we consult with our employees and trade unions about changes to our business and employment conditions. All employees are entitled to join a union of their choice. At the year end, 70% of the Group's employees belonged to one of the three trade unions active in the mining industry, a decrease compared with 77% in 2018 following the recruitment of new staff with a lower proportion of union membership.

Pay and benefits

We aim to provide fair remuneration to our employees and to incentivise safety and productivity. Operational employee and divisional manager remuneration comprises base pay plus a discretionary award linked to health and safety performance and production targets. Divisional manager remuneration also typically includes an element of discretionary bonus linked to production efficiency and cost control. The Group takes measures to align wage increases with inflation in living costs, in particular for lower paid employees. All employees are paid above both the minimum wage and the living wage as defined by the Government of Kazakhstan.

In accordance with regulations in Kazakhstan and our employee agreements, we make payments to employees and former employees for illness and disability sustained at our operations. The financial impacts of our ongoing illness and disability obligations are covered in the consolidated financial statements in note 27 on page 155.

Attracting and retaining skilled employees

Employee turnover is actively managed at each of the Group's operations and by the Human Resources team. Retention of skilled staff is a key factor in the successful development of the Group's new assets at Aktogay and Bozshakol. When employees leave the Group, exit interviews are conducted to collect feedback.

A Leadership Development Programme is in place to identify potential future leaders so that support in the form of training and mentoring can be offered. Potential successors are identified for key positions and individual development plans are created for those identified as potential successors. There are on average more than 50 such key positions at each of Aktogay and Bozshakol and in the East Region. Part of the annual assessment process for expatriate employees is how well they have been mentoring, coaching and training their local colleagues. Progress towards promotion or continued development is reviewed quarterly.

TO FIND OUT MORE ABOUT THE APPRENTICE SCHEME, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

> My son won a scholarship to study mining at the technical college. I didn't think that I could ever provide my son with a higher education. I am incredibly grateful to KAZ Minerals for giving such a chance to my son

Mother of KAZ Minerals Student, Ayagoz

Training and development

Professional development is one of the Group's five corporate values. We are committed to ensuring that employees continue their professional development, with the aim of increasing productivity, efficiency and safety. The Group takes a long-term view of building capabilities and leadership qualities amongst its staff which are viewed as critical to our growth strategy.

In 2019, employees each received an average of 70 hours of training (2018: 62 hours) typically consisting of 36 hours of safety training, 28 hours of professional education and six hours of additional education. In addition, operational training takes place which includes a significant health and safety component that is not recorded separately as health and safety training. Topics include safe operation of machinery and vehicles, electrical and fire safety, labour protection training and physical fitness.

At Aktogay and Bozshakol, training and succession programmes aim to transfer skills from senior and experienced team members to a new generation of operators and managers. In 2019, the Group established a technical training centre at Aktogay and launched an apprenticeship programme for locally recruited trainees, with approximately 250 apprentices entering training during the year.

Apprentices benefit from skills transfer and real-world experiences, whilst the Group benefits from establishing a pipeline of future employees with relevant qualifications and an existing relationship with KAZ Minerals.

KAZ Minerals also offers grants to promising students and has funded the renovation of a nearby technical college. Feedback from the local community on the apprenticeship scheme has been very positive as the Group is opening up valuable employment and training opportunities for the local population.

Diversity and equality

Our goal is to employ a skilled workforce that reflects the demographic of the regions in which we operate and to create a positive, supportive and inclusive culture. The Group has established procedures to ensure that there are no instances of discrimination on the basis of age, gender, race, nationality, ethnic origin, family situation, religion, language, political beliefs, sexual orientation, pregnancy, maternity, paternity or disability. Any reports of discrimination or harassment are investigated.

TO FIND OUT MORE ABOUT EQUALITY AND DIVERSITY AT KAZ MINERALS, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

In line with the Group's corporate values we seek to select, recruit and promote employees based on merit. We give equal access to training and career development opportunities appropriate for every employee's experience level.

We aim to develop the expertise required for our operations from our existing workforce, recruiting locally where possible. The Group has a leadership programme in place focused on the training and development of national employees to fill key positions in the future. Our operations are located in Kazakhstan and Kyrgyzstan and in 2019, 98% of the Group's permanent employees were nationals of these countries.

In circumstances where specialist skills are required, we draw on international expertise with a view to transferring knowledge and best practice in the medium to long term. The number of expatriates at KAZ Minerals is limited and they are largely employed at Aktogay and Bozshakol working alongside local teams who will ultimately take over the full management of operations. At Bozshakol, following the initial commissioning and establishment of working practices, operational management has been transferred from expatriates on fixed-term contracts to permanent employees, with international expertise retained to provide support on specific technical matters.

Gender equality

KAZ Minerals is committed to offering equality of opportunity to all current and potential future employees, regardless of gender. The Group has a relatively high female representation in its workforce benchmarked against major mining companies, at 22% of total employees (18% including temporary construction workers employed at the Aktogay II project) and the proportion of females in roles which are not prohibited by law is 39%. This is reflected at senior management level, where 22% are female and 25% of the members of the Board are female.

The Group is pursuing initiatives to increase the diversity of staff it employs to support equality of opportunity at all levels in the business.

The Group offers up to three years of maternity or paternity leave and re-induction training for employees returning from leave.

KAZ Minerals regularly reviews salaries to check for equality of pay for equivalent roles, to ensure that a gender pay gap does not emerge.

The Group is lobbying for a change in regulations in Kazakhstan which restrict certain operational roles to male employees only. A change in these regulations could lead to a higher proportion of female employees in the Group's workforce in the future.

Female employees (% of total)

Ethics, compliance, anti-bribery and corruption

Integrity is one of the Group's five core corporate values. The Board is responsible for overseeing the Group's approach to ethics and compliance and is committed to maintaining the highest standards. The Group's Anti-Bribery and Corruption Compliance Programme has been developed in line with the requirements of the UK Bribery Act 2010 across all operations, with relevant clauses included as part of the Group's standard terms and conditions with suppliers since 2011. See page 84 for a description of the Group's policies and due diligence procedures undertaken in relation to anti-bribery and corruption.

The Group maintains an anonymous reporting facility (Speak Up) to encourage employees to report any concerns regarding breaches of ethics. A risk assessment is used to identify the categories of employees which require training in anti-bribery and corruption. This includes employees working in procurement, sales, finance and general management and individuals who interact with governments or regulatory bodies.

TO FIND OUT MORE ABOUT THE CODE OF FAIR EMPLOYMENT, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

TO FIND OUT MORE ABOUT ETHICS, ANTI-BRIBERY AND CORRUPTION AT KAZ MINERALS, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

Suppliers

The Group's supply chain includes contractors and suppliers providing labour, energy, transport, smelting, equipment, consumables and raw materials required for the production and sale of copper.

In 2019, a total of 182 contracting firms worked at the Group's underground mines in the East Region and a further 270 firms were employed at the open pit mines at Aktogay and Bozshakol, together employing around 11,000 contractors at our sites.

Suppliers' Charter

KAZ Minerals is committed to high standards of corporate social responsibility. To ensure that our suppliers understand what standards we require of them, we established the KAZ Minerals Suppliers' Charter in 2016.

The Suppliers' Charter sets out the Group's expectations in the areas of anti-bribery and corruption, employee wellbeing, environmental responsibility, community relations and human rights. Suppliers are encouraged to report all suspected or actual breaches of the principles set out in the Suppliers' Charter either to KAZ Minerals management or by using the anonymous Speak Up system.

All suppliers are required to make a commitment to upholding the standards set out in the Suppliers' Charter as a condition of starting or continuing to work with KAZ Minerals. The Group also conducts a separate due diligence exercise on new suppliers to ensure that we only work with suppliers who meet our standards.

Procurement standards

The Group's Environmental Policy includes a commitment to reduce waste, prevent pollution and minimise the overall impact of the Group's activities on the environment. The Suppliers' Charter includes commitments from our suppliers to (i) comply with local environmental protection regulations and implement the necessary actions to limit the impact of their activities on the environment; (ii) promote greater environmental responsibility and the use of goods and services which help to mitigate our environmental impact, as well as better managing and utilising resources such as energy, paper, water and waste; and (iii) promote the development and distribution of environmentally friendly technologies.

Code of Fair Employment

The Group established a Code of Fair Employment in 2016 which sets out the standards it expects to be upheld in relation to its own employees as well as the employees of suppliers or contractors to the Group. As part of the Suppliers' Charter, suppliers are also required to agree to the terms of the Code of Fair Employment.

The Code of Fair Employment can be viewed on the Group's website and contains commitments to prevent forced labour, child labour, human trafficking and inhumane treatment. The retention of passports or identification documents, taking of deposits, restrictions on freedom of movement and the charging of recruitment fees to workers are forbidden. All employees must have contracts of employment, be paid above the legal minimum wage, be treated equally and have access to adequate grievance procedures. The Group is committed to the prevention of modern slavery and human trafficking in its supply chain and publishes an annual statement, approved by the Board, in accordance with the UK Modern Slavery Act.

Supply chain monitoring

A training programme was carried out for approximately 1,600 individuals from procurement teams, managers involved in the supervision of contractors and other relevant employees in 2019. The aim of the training was to raise awareness of the standards contained within the Suppliers' Charter, in particular those relating to modern slavery and human trafficking. Staff are expected to monitor suppliers and contractors to prevent instances of modern slavery in the Group's supply chain and to report any suspected breaches of the Group's policies through the appropriate channels.

TO VIEW OUR CODE OF FAIR EMPLOYMENT, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

TO FIND OUT MORE ABOUT THE SUPPLIERS' CHARTER, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

Modern Slavery Act 2015

The Board recognises the importance of the provisions of the Modern Slavery Act 2015 and the Directors aim to ensure that slavery and human trafficking have no part in the Group's supply chain. The Group has always been vigilant about employee welfare and aims to be transparent in its practices. The Group has established a Code of Fair Employment which sets out its stance in relation to forced labour, slavery, human trafficking and child labour and this can be found on the Group's website at www.kazminerals.com. The Human Resources department periodically conducts a Group-wide review to check internal compliance with the Code of Fair Employment and no instances of any breach have been identified.

Risk assessments of the Group's major contractors and suppliers are carried out to identify those with a higher potential risk of modern slavery. General Directors at each of the Group's operations are required to confirm that they have reported any conditions which could indicate modern slavery amongst contractors' staff working at KAZ Minerals' sites or confirm that no such conditions were observed. Relevant staff were trained during the year to raise awareness of modern slavery issues, with a particular focus on management and contractors working on our construction sites. Employees are encouraged to report any instance or suspected occurrence of modern slavery or human trafficking in the supply chain to management or through the Group's Speak Up helpline facility.

The Group has a Suppliers' Charter which sets out our expectations of our suppliers in relation to their treatment of their workers to ensure they are committed to employment practices which are acceptable to the Group. Under our standard terms of business our customers and suppliers agree to comply with the principles of the Code of Fair Employment and the Suppliers' Charter and to ensure there is no modern slavery within their operations.

The Group published its third Modern Slavery Act statement in May 2019 which can be found on our website at www.kazminerals.com.

Communities

Consultation and communication

KAZ Minerals is committed to promoting community development and maintaining lines of communication with communities near its operations and potential new projects. The operations' General Directors have overall responsibility for community relations in their respective areas.

Regular 'town hall' meetings are held between mine site representatives and local communities, in addition to formal public consultations required by law. The Group also hosts site visits for local community groups, to familiarise them with our operations and answer any queries they may have.

Indigenous peoples and resettlement

The Group's commitment to respecting the rights of indigenous peoples and its approach to resettlement are contained in its Human Rights Policy, described on page 64. The areas in which the Group has operated or developed new mining projects historically have been sparsely populated and resettlement of indigenous populations has not been necessary. It is unlikely that future projects will require resettlement, but the Group will always seek to avoid involuntary resettlement. KAZ Minerals is committed to the protection of culturally sensitive areas.

Under the terms of subsoil use law in Kazakhstan, the Group is required to give preference to Kazakhstan nationals during the performance of subsoil use operations and to invest in the training of local workers.

Social projects and local procurement

KAZ Minerals supports communities in Kazakhstan, Russia and Kyrgyzstan by investing in projects that benefit society close to its operations as well as national projects.

The Group has a social investment policy and monitors projects that are funded to ensure they meet the aims and objectives of the Group. The types of projects the Group seeks to support are: (i) projects local to the Group's operations in the areas of healthcare, education, infrastructure and sport; (ii) national projects in the Group's countries of operation also in the areas of healthcare, education, infrastructure, culture and sport; and (iii) projects to promote the culture and economic profile of the Group's countries of operation.

Social investments of $22 million were made during 2019, including funding for a new cultural centre in Nur-Sultan, sports facilities in Pavlodar and sponsorship of a technical college in the East Region of Kazakhstan.

Following the acquisition of the Baimskaya project the Group has commenced a social investment programme in Russia. KAZ Minerals is supporting the New Economic School ("NES"), a leading international business school in Moscow and in 2020 will also support Meschersky Park, a public sports and recreation facility based in historic woodland close to Moscow.

New playground and kindergarten facilities for 900 children, funded by KAZ Minerals in the villages of Aktogay and Kopa, close to the Group's Aktogay mine

Lymatria dispar, Bozshakol

As required by subsoil use law, the Group prioritises local procurement to assist diverse economic growth within Kazakhstan. In the East Region, local procurement was 68% of total spending (2018: 65%). The level of procurement from outside Kazakhstan at Aktogay and Bozshakol in 2019 was 81% and 72% respectively. These mines employ technology that is only possible to source internationally.

Biodiversity

The Group is committed to the protection of biodiversity in the areas which may be affected by its operations and avoids operating in areas with high biodiversity value. The Group's priority for biodiversity protection has been to manage the potentially adverse effects that the development of new projects or mining operations could have.

Human Rights

KAZ Minerals acknowledges that human rights are basic rights that form the foundation for freedom, justice and peace, which apply equally and universally in all countries. We are guided by our Human Rights Policy which has been approved by the Board and which can be found on our website. KAZ Minerals supports human rights that are defined, recognised and identified in international conventions. We follow the international human rights principles encompassed in the Universal Declaration of Human Rights and have adopted the UN Guiding Principles on Business and Human Rights. As set out in our Code of Fair Employment, we commit to our employees working in an environment and under conditions that respect their rights and we require the same standards from our business partners. We respect the right to freedom of association and consult our employees and trade unions about proposed changes to our business and employment conditions. Through due diligence we aim to prevent and mitigate any infringement of human rights both internally and amongst our business partners. Due diligence undertaken in pursuance of the Group's Human Rights policy includes consultation with local communities during project development or any major operational changes that may affect them and monitoring of working conditions for our own employees and the employees of contractors and suppliers, as described above. We respect and protect local heritage and culture.

TO FIND OUT MORE ABOUT OUR APPROACH TO BIODIVERSITY, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

TO FIND OUT MORE ABOUT THE GROUP'S HUMAN RIGHTS POLICY, PLEASE VISIT OUR WEBSITE.
www.kazminerals.com

Materiality Assessment

There are no changes to the Group's materiality assessment in 2019.

External stakeholder priorities (Moderate – High) / Internal business priorities (Moderate – High)

External stakeholder priorities	Internal business priorities: Moderate	Internal business priorities: High
High	Biodiversity Emissions to air GHG emissions Human rights Licence to operate Safety training Social investment	Anti-bribery and corruption Contractor safety Energy use Equality and diversity Fatalities Labour relations (includes collective bargaining and freedom of association) Tailings management Training and development Waste management Water use and management Workplace injuries and incidents
Moderate	Anti-competitive behaviour Business integrity and compliance Contractual integrity Economic development Employees' wellbeing Rehabilitation/closure Resettlement Revenue and tax transparency Supplier conduct	Occupational health Pay and benefits Resource use efficiency

Non-financial information statement

The non-financial reporting requirements contained in sections 414CA and 414CB of the Companies Act 2006 require companies to guide stakeholders to where the relevant non-financial information is included within our Strategic report. Further information on the basis of the preparation of our non-financial information can be found in our Sustainability report.

In accordance with the Non-Financial Reporting Directive, the table below shows the location of reporting on key non-financial matters:

Reporting requirement	Policies and governing documents	Associated information, including principal risks	Pages
Environmental matters	Environmental Policy[1]	Environmental impacts	53
		Green procurement	62
		Environmental risks	69
		TCFD Disclosure table	55
Employees	Health and Safety Policy[2]	Health and safety	52
	Code of Fair Employment[1]	Employees	59
	Diversity and Equality Policy[2]	Diversity and Equality	60
	Speak Up Policy[1]	Code of Fair Employment	59
		Employees risk	68
		Health and safety risks	68
		Diversity	85
Human rights	Suppliers' Charter[1]	Suppliers	62
	Modern Slavery Act Statement[1]	Modern Slavery Act 2015	63
	Human Rights Policy[1]	Human Rights	64
Social matters	Social Investment Policy[2]	Communities	63
		Community and labour relations risks	68
Anti-bribery and corruption	Anti-Bribery and Corruption Code[1]	Anti-bribery and corruption (ABC)	84
	Gifts and Hospitality Policy[1]	Ethics, compliance, anti-bribery and corruption	61
		Legal and regulatory compliance risks	70
Description of business model	Business model		14-15
Non-financial key performance indicators	Our strategy		24-25
	Key performance indicators, including health and safety		28-30

1 Available on our website www.kazminerals.com.
2 Available to employees internally. Not published externally.

EFFECTIVE RISK MANAGEMENT

The Group has an effective risk management process to mitigate exposure to risk, guide its strategy, improve operations and protect its stakeholders.

Risk management framework

The objective of the Group's risk management framework is to manage risk appropriately to support the strategic objectives of the Group. It is designed to manage rather than eliminate the risk of failure to achieve business objectives and to provide reasonable, not absolute assurance.

The Board has overall responsibility for risk management and determines the Group's risk strategy, assesses and approves risk appetite and monitors risk exposure consistent with strategic priorities. The Board has ultimate responsibility for the effectiveness of internal control systems. The Board is supported by other Committees which monitor risks specific to certain areas:

- The Audit Committee oversees the Group's risk management framework;
- The Health, Safety and Sustainability Committee reviews health, safety and sustainability risk management across the Group;
- The Remuneration Committee ensures that the remuneration structure does not encourage excessive risk taking by management;
- The Nomination Committee ensures that the composition of the Board and its Committees is appropriate to oversee risk management;
- The Projects Assurance Committee monitors risks relating to the delivery of the Group's major projects; and
- The Chief Executive Officer and Executive Committee implement the risk strategy determined by the Board.

The General Directors of each operation and functional leadership teams have overall responsibility for the identification and management of risk within their respective areas. The Executive Committee, led by the Chief Executive Officer, monitors the risks related to achieving strategic objectives and oversees operating plans and the implementation of controls.

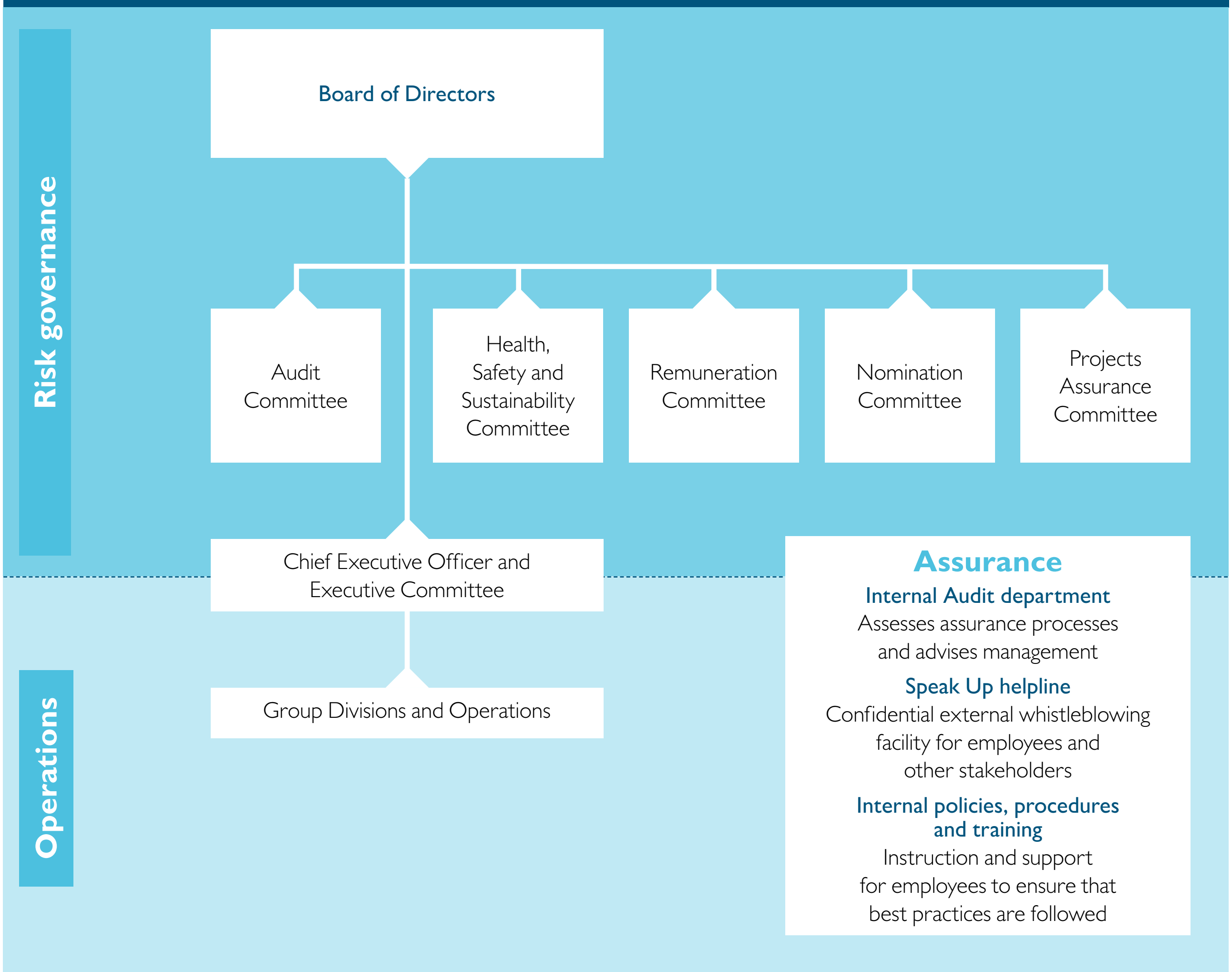
The Board has completed a robust assessment of the Group's principal risks. The Group Risk function provides guidelines, infrastructure and best practice to support risk identification, risk assessment and risk monitoring across the Group and helps to promote an appropriate risk culture. Management is also supported by the Group's Internal Audit function, which reviews the design and operating effectiveness of controls. Further details of the Group's approach to internal control are set out in the Governance framework report on page 85.

Identification of principal risks and emerging risks

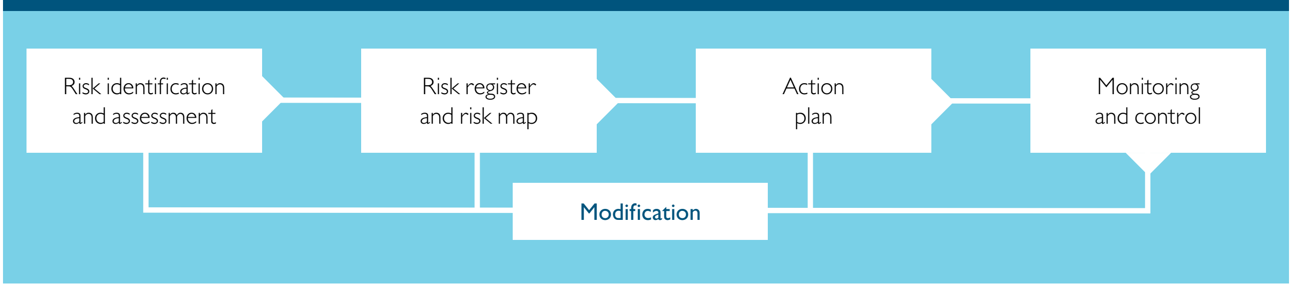
The Group's Risk function is responsible for the Group risk map through which principal risks are identified and assessed. Risks from across the Group's individual risk registers are aggregated, evaluated and prioritised according to the potential severity and likelihood of occurrence. The Board and Audit Committee review the Group's principal risks and any updates on developments, their outlook and the mitigating actions and controls in place. A description of our principal risks, including impact and mitigating actions, can be found on pages 68 to 72.

In addition to principal risks, the Group has developed a process for the identification and monitoring of emerging risks. These risks are defined as being at an early stage of identification and/or are likely to increase significantly in the future. The Group Risk function has established an emerging risk framework and risk register, which documents and assesses key emerging risks which have the potential to significantly impact the Group's strategy. The results of this assessment are reported to the Board on a biannual basis for review and challenge. The Board currently considers those emerging risks which are most significant to the Group to include: macroeconomic disruption in the form of potential global protectionism and trade tariffs; long-term political instability in the countries in which the Group operates; technological disruption and environmental and climate change including societal expectations around required standards and responsible investing. The Group's disclosures in response to the requirements of the Task Force on Climate-Related Financial Disclosures are on page 55.

Risk governance structure



Risk management framework



The Group's principal risks are set out below, together with mitigating actions. There may be other risks, unknown or currently considered immaterial, which could become material. The risks set out below are not in order of likelihood of occurrence or materiality and should be viewed, as with any forward-looking statements in this document, with regard to the cautionary statement on page 196.

Sustainability Risks

Health and safety

Impact	Mitigation	Link to strategy
Mining is a hazardous industry. Health and safety incidents could result in harm to people, as well as production disruption, financial loss and reputational damage. The Group is in a period of construction activity, increasing potential health and safety exposures.	The Group's goal is for zero fatalities and to seek to minimise health and safety incidents. Policies and procedures are designed to identify and monitor risks and provide a clear framework for conducting business. This is supported by regular training and awareness campaigns for employees and contractors. In June 2019 the Group began its 'Goal Zero' initiative, which aims to provide safe working conditions for all employees of the Group. 'Goal Zero' covers industrial safety, occupational safety and environmental protection. The HSS Committee reviews and monitors associated risks across the Group. Further details of the HSS function are set out in the Sustainability report.	1 Delivering major growth projects 2 Optimisation of existing assets 4 Be a socially responsible operator **Risk change** The Group has seen a long-term reduction in fatalities but the goal of zero fatalities has not been achieved. No change.

Community and labour relations

Impact	Mitigation	Link to strategy
The Group operates in areas where it is a major employer, where employees are represented by labour unions and where it may provide support to the local community. This may impose restrictions on the Group's flexibility in taking certain operating decisions. Failure to identify and manage the concerns and expectations of local communities and the labour force could affect the Group's reputation and social licence to operate and could result in production disruptions and increases in operating costs. Wage negotiations could be impacted by higher commodity prices, higher domestic inflation or the continued weakness of the tenge.	The Group engages with community representatives, unions and employees and aims to address concerns raised by different stakeholders. Through responsible behaviour, acting transparently, promoting dialogue and fulfilling its commitments, the Group minimises potentially negative impacts. Aktogay and Bozshakol are in remote locations where the community relations risk is reduced. As part of the initial development of Baimskaya the Group has met with community representatives in the Chukotka region to understand local issues and commence a dialogue. Further details of the Group's social programme are set out in the Sustainability report.	1 Delivering major growth projects 2 Optimisation of existing assets 4 Be a socially responsible operator **Risk change** No change. The Group has a maturing asset base in the East Region of Kazakhstan and seeks to manage any reduction in workforce responsibly, offering new roles where possible, for example at the Aktogay expansion project.

Employees

Impact	Mitigation	Link to strategy
The Group is dependent on its ability to attract and retain highly skilled personnel. Failure to do so could have a negative impact on operations or the successful implementation of growth projects and result in higher operating costs to recruit required staff. The remote location of some operations increases this challenge. The Group will be entering a period of increased recruitment to staff the operational phase of the Aktogay expansion, and relating to the potential development of Baimskaya.	The Group actively monitors the labour market to remain competitive in the hiring of staff and provides remuneration structures and development opportunities to attract and retain key employees. Key positions are identified at all locations, and training and succession plans developed. A leadership development programme is in place to provide a talent pipeline of national workers for key positions and aid retention. International workers with appropriate expertise assist during the initial phase of operations.	1 Delivering major growth projects 2 Optimisation of existing assets 4 Be a socially responsible operator **Risk change** No change. In 2020 the Group is recruiting for the Aktogay expansion project.

Environmental

Impact	Mitigation	Link to strategy
Mining operations involve the use of toxic substances and require the storage of large volumes of waste materials in tailings dams, which could result in spillages, loss of life and significant environmental damage. The Group is subject to environmental laws and regulations which are continually developing, including those to tackle climate change. Failure to comply with applicable laws could lead to the suspension of operating licences, the imposition of financial penalties or costly compliance costs and reputational damage. Environmental practices face additional scrutiny as societal expectations around responsible investing evolve. This could impact the Group's operations or access to capital.	Policies and procedures are in place to set out required operating standards and to monitor environmental impacts. The Group liaises with relevant governmental bodies on environmental matters, including legislation changes. During 2019 the Group completed the closure of the Yubileyno-Snegirikhinsky mine and implemented water conservation initiatives which resulted in a decrease in the Group's water intensity per tonne of ore processed from 0.62 m^3/t in 2018 to 0.38 m^3/t in 2019. The Group's CO_2 per tonne of ore processed reduced by 4% in 2019 compared with 2018. Further details are set out in the Sustainability report.	1 Delivering major growth projects 2 Optimisation of existing assets 4 Be a socially responsible operator **Risk change** ↑ Given an increased focus on environmental stewardship from investors, regulators and other stakeholders, the risk is assessed to have increased.

Operational Risks

Business interruption*

Impact	Mitigation	Link to strategy
Operations are subject to a number of risks not wholly within the Group's control, including: geological and technological challenges; weather, pandemic disease or other natural phenomena; damage to or failure of equipment and infrastructure; information technology and cyber risks; loss or interruption to key inputs such as electricity and water; and the availability of key supplies and services, including the Balkhash smelter. Any disruption could impact production, may require the Group to incur unplanned expenditure and negatively impact cash flows.	In-house and third-party specialists are utilised to identify and manage operational risks and to recommend improvements. Equipment and facilities are maintained appropriately and regularly inspected. Property damage and business interruption insurance programmes provide some protection from major incidents. Should a significant outage occur at the Balkhash smelter the Group believes it could sell concentrate directly to other customers.	1 Delivering major growth projects 2 Optimisation of existing assets **Risk change** ⇔ No change.

New projects and commissioning*

Impact	Mitigation	Link to strategy
Projects may fail to achieve the desired economic returns due to an inability to recover mineral resources, design or construction deficiencies, a failure to achieve expected operating parameters or because of capital or operating costs being higher than expected. Failure to manage new projects effectively or a lack of available financing may prevent or delay completion of projects. There are various project risks associated with the successful development of the Baimskaya copper project, including its remote location, the delivery of government support for infrastructure, obtaining certain tax incentives and the local weather conditions.	New projects are subject to rigorous assessment prior to approval including feasibility or technical studies and capital appraisal. Specialists are utilised throughout the life cycle of projects. Project management and capital expenditure planning and monitoring procedures are in place to review performance against milestones and budgets. This includes the Projects Assurance Committee which reports to the Board. In relation to the Baimskaya copper project, an international standard pre-feasibility study has been performed by Fluor and the mine plan is based on a JORC resource. The Group is progressing a full bankable feasibility study to determine the detailed design of the mine and the associated capital cost. Further details of the major growth projects are included in the Operating review.	1 Delivering major growth projects 3 Take advantage of natural resource opportunities **Risk change** ↑ This risk is assessed to have increased following the acquisition of Baimskaya and the commencement of pioneer works, and the increase in construction activity at Aktogay.

Reserves and resources

Impact	Mitigation	Link to strategy
The Group's ore reserves are in part based on an estimation method established by the former Soviet Union. There are numerous uncertainties inherent in estimating ore reserves, which if changed, could require the need to restate ore reserves and impact the economic viability of affected operations and development projects.	The Group's ore reserves and mineral resources are published annually in accordance with the criteria of the JORC Code and reviewed by a Competent Person. This includes mine site visits where considered appropriate and the conversion from the former Soviet Union estimation to that prescribed by the JORC Code. Drilling and exploration programmes are conducted to enhance the understanding of geological information.	1 Delivering major growth projects 2 Optimisation of existing assets 3 Take advantage of natural resource opportunities **Risk change** No change.

Political

Impact	Mitigation	Link to strategy
The Group could be affected by political instability or social and economic changes in the countries in which it operates. This could include a change in government, the granting and renewal of permits and changes to foreign trade or legislation that could affect the business environment and negatively impact the Group's business, financial performance and licence to operate. Further international sanctions on Russia could impact the development of Baimskaya, as well as the supply of certain goods and services to the Group's existing operations.	A proactive dialogue is maintained with KAZ Minerals' host governments across a range of issues. Developments are monitored closely and lobbying is conducted where appropriate. Kazakhstan remains one of the most politically stable and economically developed countries in Central Asia. During 2019, Nursultan Nazarbayev was succeeded by Kassym-Jomart Tokayev as President of Kazakhstan. The Board continues to view the political, social and economic environment within Kazakhstan favourably. In Russia, the Group maintains an ongoing dialogue with the government and key stakeholders. The Baimskaya acquisition was structured with Deferred Consideration to incentivise the Vendor, as a local partner, to assist in the delivery of the project.	1 Delivering major growth projects 2 Optimisation of existing assets 3 Take advantage of natural resource opportunities **Risk change** No change.

Legal and regulatory compliance

Impact	Mitigation	Link to strategy
The Group is subject to various legal and regulatory requirements across all of its jurisdictions including subsoil usage rights in Kazakhstan, Kyrgyzstan and Russia and UK governance rules including related party transactions and anti-bribery and corruption. Legislation and taxation may be subject to change and uncertainty of interpretation, application and enforcement. In a number of jurisdictions around the world governments have been increasing taxation on resource companies. Non-compliance with legislation could result in regulatory challenges, fines, litigation and ultimately the loss of operating licences. Substantial payments of tax could arise for the Group, or tax receivable balances may not be recovered as expected.	Management engages with the relevant regulatory authorities and seeks appropriate advice to ensure compliance with all relevant legislation and subsoil use contracts. A specialist department is tasked with monitoring compliance with the terms of subsoil use contracts in Kazakhstan. Management works closely with the tax authorities in the review of proposed amendments to legislation. Further details of the Group's tax strategy and risk management are set out in the Financial review. Appropriate monitoring and disclosure procedures are in place for related party transactions. Social investments are made in accordance with a Board approved policy and are overseen by the Group's Social Investment Committee. The Group's corporate policies are applied in Russia where a dedicated team is managing legal and regulatory compliance.	1 Delivering major growth projects 2 Optimisation of existing assets 3 Take advantage of natural resource opportunities **Risk change** No change.

Financial Risks

Commodity price*

Impact	Mitigation	Link to strategy
The Group's results are heavily dependent on the commodity price for copper and to a lesser extent, the prices of gold, silver and zinc. Commodity prices can fluctuate significantly and are dependent on several factors, including global supply and demand and investor sentiment. The escalation of trade tensions between the US and China negatively impacted copper prices in 2019 and, depending on developments, may continue to do so. The emergence of the Covid-19 coronavirus in China in December 2019, and the subsequent increase in reported cases has raised concerns over the economic outlook for China. As the largest consumer of copper, a reduction in China's economic growth could have a material adverse impact on the copper price.	The Group regularly reviews its sensitivity to fluctuations in commodity prices. The Group is not currently and does not normally hedge commodity prices but may enter into a hedge programme where the Board determines it is appropriate to provide greater certainty over future cash flows. A sensitivity analysis to movements in commodity prices is included in the Market Overview.	1 Delivering major growth projects 2 Optimisation of existing assets 3 Take advantage of natural resource opportunities **Risk change** ⇔ Given continued volatility and uncertainty, commodity prices continue to be a principal risk driver.

Foreign exchange and inflation*

Impact	Mitigation	Link to strategy
Fluctuations in rates of exchange or inflation in the jurisdictions to which the Group is exposed could result in future increased costs. As the functional currency of the Group's operating entities is their local currency, fluctuations in exchange rates can give rise to exchange gains and losses in the income statement and volatility in the level of net assets recorded on the Group's balance sheet.	Where possible the Group conducts its business and maintains its financial assets and liabilities in US dollars. The Group generally does not hedge its exposure to foreign currency risk in respect of operating expenses. Further details are set out in note 33 to the financial statements.	2 Optimisation of existing assets **Risk change** ⇔ No change.

Exposure to China

Impact	Mitigation	Link to strategy
Sales are made to a limited number of customers in China, particularly in respect of copper concentrate output. Treatment and refining charges are dependent upon Chinese smelting capacity and the level of copper concentrate supply in the region. China is an important source of financing to the Group with long-term debt facilities of $2.4 billion at 31 December 2019. In addition, the Group uses contractors, services and materials from China. The Chinese economy and its outlook have been negatively affected by global trade tensions and the emergence of the Covid-19 coronavirus. Restrictions on the movement of goods, people and services could impact the Group's operations and projects, the availability of Chinese credit and its demand for commodities.	Aktogay and Bozshakol produce a copper concentrate that is attractive to Chinese smelters, being 'clean' and high in sulphur content. The Group has established good relationships with strategic customers in China. The Group maintains relationships with a number of international lending banks, has facilities in place with the PXF syndicate, DBK and CAT Financial, and has the flexibility to consider other sources of capital if required.	1 Delivering major growth projects 2 Optimisation of existing assets 3 Take advantage of natural resource opportunities **Risk change** ↑ This risk is assessed to have increased following recent macroeconomic tensions and other adverse indicators for the Chinese economy.

Acquisitions and divestments

Impact	Mitigation	Link to strategy
The Group may acquire or dispose of assets and businesses which fail to achieve the expected benefit or value to the Group. Changing market conditions, incorrect assumptions or deficiencies in due diligence could result in the wrong decisions being made and in acquisitions or disposals failing to deliver expected benefits. The Restructuring was effected under the laws and regulations of Kazakhstan which are subject to change and open to interpretation, including the legal and tax aspects of the Restructuring, which could give rise to liabilities for KAZ Minerals.	A rigorous assessment process is undertaken to assess all potential acquisitions and divestments by specialist staff, supported by external advisers where appropriate. Due diligence processes are undertaken and material transactions are subject to Board review and approval, including ensuring the transaction is aligned with the Group's strategy, consideration of the key assumptions being applied and the risks identified.	2 Optimisation of existing assets 3 Take advantage of natural resource opportunities **Risk change** ↓ The acquisition of Baimskaya was completed in January 2019 and is now considered a project risk.

Liquidity

Impact	Mitigation	Link to strategy
The Group is exposed to liquidity risk if it is unable to meet payment obligations as they fall due or is unable to access acceptable sources of finance. Non-compliance with financial covenants could result in borrowing facilities becoming uncommitted and repayable. Baimskaya is a large-scale project, the development of which will require additional financing which will increase the debt levels of the Group. Failure to manage liquidity risk could have a material impact on the Group's cash flows, earnings and financial position.	Forecast cash flows are closely monitored and the financing strategy is set by the Board. Adequate levels of committed funds are maintained with $541 million cash and cash equivalents and $306 million of undrawn facilities at 31 December 2019. In January 2020, the Group added further liquidity with a refinancing of its PXF debt facility, including an increase in facility commitments to $1.0 billion. The Group's existing operations are highly cash generative. The Group has a successful track record of raising finance for major projects. In respect of Baimskaya, in parallel with the feasibility study, the Group is continuing discussions with banks on financing the construction phase and is evaluating the potential for partnering. Further details regarding going concern and viability are included in note 2 to the financial statements and page 73 respectively.	1 Delivering major growth projects 2 Optimisation of existing assets 3 Take advantage of natural resource opportunities **Risk change** ⇔ In the near term liquidity risk is considered to have reduced following the successful refinancing of the Group's PXF facility. However, in the longer term the development of Baimskaya will require additional financing which will increase the debt levels of the Group.

* Represents those principal risks considered as specific downside cases as part of the viability assessment on page 73.

The assessment of the Group's prospects is based upon the Group's strategy taking into consideration its principal risks. The Group develops and operates large scale, low cost copper mines and therefore the market for copper is a key factor in assessing the Group's longer-term prospects. Further information in respect of the market and outlook for copper and the Group's products is included in the market overview on pages 26 to 27. The Group benefits from strategic advantages and is amongst the lowest operating cost copper producers in the world. Details of the Group's business model and strategy are set out on pages 14 to 15 and 24 to 25.

In accordance with the UK Corporate Governance Code, the Board has assessed the Group's prospects and longer-term viability and has selected a period of three years, to 31 December 2022, for this assessment. This period is considered appropriate as:

- The Group's results are heavily dependent on the commodity price for copper which can fluctuate significantly and be impacted by global macroeconomic developments. Copper prices are therefore difficult to forecast for an extended period;
- Exchange rates and inflation rates in jurisdictions in which the Group operates, important drivers of the Group's operating costs, are difficult to forecast beyond three years;
- The Group's existing debt facilities are amortising during the viability period, with scheduled repayments of $1.5 billion; and
- The Group is currently assessing the capital development, partnering and financing options for the construction of Baimskaya, the outcome of which will significantly impact the Group's capital expenditure and financing.

This viability statement should be read in conjunction with the going concern disclosure set out on page 132.

Assessment of prospects

In assessing the Group's prospects, the Board has considered the current position of the Group including: available liquidity, including gross liquid funds and undrawn facilities of $847 million at 31 December 2019, the cost competitiveness of its operations, the performance to date of Aktogay and Bozshakol, the recent successful $1.0 billion refinancing of the PXF facility and future capital requirements, including the Aktogay expansion and initial study and pioneer works at the Baimskaya copper project. Further material expenditure in respect of the development of Baimskaya is subject to the completion of a feasibility study and Board approval and will require the arrangement of appropriate financing. As a result, no capital commitments associated with the project development have been incorporated in the viability assessment.

The Group's operations are located in the CIS and the significant majority of its sales are made to customers outside the UK and EU, therefore Brexit is not expected to have a material impact on the Group's viability.

The Board has considered all the principal risks set out on pages 68 to 72 but has focused on those principal risks which alone or in conjunction could have a material impact on production, profitability, cash flows and liquidity over the assessment period:

Commodity prices: the Group's financial outlook is sensitive to commodity prices. A sustained low commodity price environment below market consensus would negatively impact the Group's profitability and cash flow.

Business interruption: the Group's operations may fail to maintain operating output as planned.

New projects and commissioning: new projects may not achieve planned commissioning dates or could be subject to additional project costs.

Foreign exchange and inflation risk: a significant appreciation of the KZT/$ exchange rate from its current level or increased inflation in Kazakhstan could have a material impact on operating costs.

Liquidity risk: for borrowing facilities to remain committed, the Group is required to comply with various obligations, including compliance with financial covenants. A faster than expected increase in US interest rates would impact the Group's financial outlook. The Group will also need to enter into new financing arrangements to develop the Baimskaya copper project.

The Board has a reasonable expectation that there would not be an unforeseen event, outside the Group's control, during the viability assessment period which would significantly restrict production or export of material from the Group's operations for a sustained period. Such events could include a natural phenomenon, a significant political or legislative change or regulatory challenge or significant civil disorder.

Process to assess the Group's prospects

The Board has performed its viability assessment based on the Group's Treasury forecast, which it reviews regularly. The forecast is prepared with input from the annual budgeting process, individual project plans and life of mine ('LOM') plans, which reflect the expected production profile and cost of operations over their economic lives.

The Board has considered the key assumptions made in the viability statement and is satisfied that they are appropriate. These include assumptions based on externally sourced views on commodity pricing, exchange rate and inflation and interest rates, as well as an internal assessment of future production levels and project commissioning dates. Commodity price assumptions have been set with reference to market consensus estimates.

To reflect the principal risks which could have a material impact on the Group's viability over the three year period, the base case model has been subjected to stress testing and sensitivity analysis. This considered severe scenarios, but not those the Board considered to be implausible, and included:

- A sustained low commodity price environment below market consensus throughout the viability period;
- A sustained low commodity price environment with lower than expected production from the Aktogay and Bozshakol operations, including a delay to the expected commissioning of the Aktogay expansion; and
- A sustained low commodity price environment and lower than expected production combined with an increase in Group operating costs due to adverse exchange rates and higher cost inflation.

In addition, reverse stress testing was performed, in particular in respect of the sensitivity of the forecasts to downward movements in the copper price. This indicated that no reasonably possible negative movement in the copper price would lead to non-compliance with financial covenants.

The Board has considered the Group's current existing debt facilities, the significant level of debt amortisation during the viability period of $1.5 billion and the likely changes to debt and financing facilities required to deliver the Group's strategy, including the study and development of the Baimskaya copper project.

Confirmation of longer-term viability

In the base case and all assessed severe downside scenarios the Group is forecast to have adequate liquidity and to be in compliance with all covenants in its facilities throughout the viability period. Taking this into account, and following an assessment of the principal risks, the Board believes there is a reasonable expectation that the Group will be able to continue in operation and continue to meet its liabilities as they fall due throughout the period to 31 December 2022.

GROWTH WITH GOOD *GOVERNANCE*

> "The successful execution of our growth strategy will create value and long-term sustainable success for our stakeholders"

Dear shareholder,

This 2019 Directors' Report has been prepared in accordance with the July 2018 edition of the UK Corporate Governance Code which applied throughout the 2019 financial year. The Company complied fully with the provisions of the Code, during the 2019 financial year, other than provision 9 which applies to the appointment of a chief executive as chair of the same company, more detail on which can be found in the Nomination Committee report on page 93. The Governance framework report on pages 78 to 87 sets out the ways in which the Company has applied the principles and complied with the provisions of the Code and describes the activities of the Board and its Committees and the matters which they have considered during the financial year.

With the new requirements under the Code, the Board has been focused on ensuring that the Group's processes are compliant. We have also incorporated the requirements of the Companies (Miscellaneous Reporting) Regulations 2018 and our Section 172 statement can be found at page 17 in the Strategic report.

During the year we were pleased to complete the acquisition of our Baimskaya asset in Russia, a significant part of our growth strategy and we have ensured that our governance processes are embedded in our Russian operations from the outset. The independent Directors have provided assistance to management over the year by way of challenge and advice and are pleased with the performance of the Group in 2019.

Operationally, both Bozshakol and Aktogay's main processing plants ran at design capacity over the year and there was notable progress on the project pipeline which will deliver near-term growth from the Aktogay expansion and longer-term growth at Baimskaya.

Purpose and strategy

We have refreshed our corporate purpose so that it is clearly focused on the sustainable future that can be achieved through copper in the green economy, which is strongly linked to our strategy of growth in copper, to ensure the sustainability of our business for the future.

Culture and Values

The culture of the business is set by our long established corporate values, the principles under which we seek to operate, (safety, long-term efficiency, teamwork, professional development and integrity) and these values are embedded by training, reward and our engagement with our staff. The internal audit processes, health and safety reports, Speak Up facility, site visits by the independent Directors, together with a number of other feedback mechanisms, provide valuable input to the Board on the culture of the Group.

Diversity and equality of opportunity were discussed at Board and Committee meetings during the year, as KAZ Minerals is committed to a culture of diversity and equality in the workplace. We aim to continue to support this further where practical, both in the general workforce and at Board level. More detail can be found in the Sustainability report on page 60 and on page 85 of the Governance framework report.

Committee framework

KAZ Minerals' corporate governance framework is in place to support the Board in delivering long-term, sustainable growth for stakeholders in a transparent and ethical manner. The five Board Committees are Audit; Health, Safety and Sustainability; Remuneration; Nomination and Projects Assurance. Each deals with specific aspects of the Group's affairs and has an important role in internal control and risk management within the Group. Further information on the Group's Board Committees, including the roles and remit of each Committee and the activities they have undertaken during the year, is set out in their respective sections of the Governance framework report which follows.

Stakeholder engagement

As a Board, we engage with our stakeholders throughout the year, so that we remain informed of their interests and mindful of our duties towards them under section 172 of the Companies Act 2006.

We conducted a review during the year of our key stakeholders and considered the ways in which the Board engages with them to ensure we have appropriate methods of engagement in place. The successful execution of our growth strategy will create value and long-term sustainable success for our stakeholders. Further information is set out in the pages that follow and in the Strategic report pages 16 to 19 and pages 50 to 65 of the Sustainability report.

We are holding our Annual General Meeting on Thursday 30 April 2020 in London and I hope that there will be strong attendance from our shareholders; we look forward to engaging with them and hearing their views on the business.

Michael Lynch-Bell
Deputy Chair and Senior Independent Director

Board Committee membership

The current membership of the Board's Committees is shown in the table below:

	Audit Committee	Health, Safety and Sustainability Committee	Nomination Committee	Remuneration Committee	Projects Assurance Committee*
Oleg Novachuk	–	–	–	–	–
Andrew Southam	–	–	–	–	–
Lynda Armstrong	–	Member	Member	Chair	Member
Alison Baker	Chair	–	Member	–	–
Vladimir Kim	–	–	–	–	–
Michael Lynch-Bell	Member	Member	Chair	Member	–
John MacKenzie	Member	Member	–	–	Chair
Charles Watson	Member	Chair	–	Member	Member

Chair of Committee   Member of Committee

* The Operations Ramp Up Assurance Committee was replaced in October 2018 with a re-formed Projects Assurance Committee.

Oleg Novachuk
Chair

Appointed to the Board: 2005

Contribution to the Company:

Oleg was one of the key members of management who, as Finance Director, Listed the Group in 2005 before his appointment as Chief Executive Officer in 2007 and Chair in 2018. As Chair, he has responsibility for strategy, government relations and business development. Oleg is uniquely qualified for his role due to his operational knowledge, project development expertise and relationships with industrial, financial and political leaders in both Kazakhstan and Russia. Since the creation of KAZ Minerals in 2014, in which Oleg played an instrumental role, KAZ Minerals has successfully developed two new world class copper mines, resulting in one of the highest growth rates in the industry and positioning the Group in the first quartile of the global cost curve.

Experience:

Before joining the Group in 2001, Oleg was chairman of Kazprombank JSC.

Michael Lynch-Bell
Deputy Chair and Senior Independent Non-executive Director

N A R H

Appointed to the Board: 2013

Contribution to the Company:

Michael's mining and other natural resources sector expertise, including in capital markets in the geographies in which we operate, gives him a clear insight into our operations and strategy. He has successfully led on Board governance for the past two years as Deputy Chair and formerly as the Senior Independent Director.

Experience:

During his 38 year career with Ernst & Young working with companies in the oil and gas industry and mining and metals industry, Michael played a key role in establishing Ernst & Young's practice in Kazakhstan and advised a number of major CIS companies on transactions including in Russia. He retired as senior partner of Ernst & Young's transaction advisory practice for mining and metals and as an elected member of its global advisory council in 2012.

Other appointments:

Michael is currently a non-executive director of Lenta, a Russian hypermarket chain, Barloworld Limited, Gem Diamonds Limited and Little Green Pharma Limited. He is also a member of the United Nations Expert Group on Resource Management. Michael was previously trustee and treasurer of ActionAid International.

Andrew Southam
Chief Executive Officer

Appointed to the Board: 2014

Contribution to the Company:

Having almost fifteen years of experience at KAZ Minerals, Andrew brings a deep understanding of the business, its culture and its stakeholders. As Chief Executive Officer, Andrew is responsible to the Board for the executive management of the Group, including leadership of the Executive Committee and implementation of the Group's strategy. Andrew was, together with Oleg Novachuk, one of the architects of the Restructuring and formation of KAZ Minerals in 2014. As Chief Financial Officer and more recently as Chief Executive Officer, Andrew has played a key role in the delivery of the Group's growth strategy which has resulted in production rising from 85 kt in 2015 to 311 kt in 2019 and amongst the lowest production costs globally.

Experience:

Andrew joined the Company in 2006 and has held a number of senior positions including Chief Financial Officer from 2013 to 2017 and was appointed Chief Executive Officer at the start of 2018. Andrew is a chartered accountant who began his career at Deloitte in London, where he provided audit and transaction services to many UK listed companies. Prior to joining the Company, Andrew worked in corporate development at GlaxoSmithKline plc.

Lynda Armstrong OBE
Independent Non-executive Director

R N H P

Appointed to the Board: 2013

Contribution to the Company:

Lynda's career in the extractives industry in operational, business development and human resources roles, together with her expertise in health and safety, provide valuable insight and guidance to the Group in its operations and projects and in its initiatives to improve health and safety performance.

Experience:

A geophysicist by training, Lynda had more than 30 years' natural resources experience with Shell. During this time, she held a number of senior exploration and operational roles, including director of UK Exploration and New Business Development, exploration director of Petroleum Development Oman and technical vice president for Shell International. She was previously chair of the trustees of the British Safety Council.

Other appointments:

Non-executive director of Ørsted A/S (formerly DONG Energy A/S), chair of the Engineering Construction Industry Training Board and president of Shell Pension Association.

John MacKenzie
Independent
Non-executive Director

P A H

Appointed to the Board: 2015

Contribution to the Company:
John's senior executive roles in the metals and mining sector and in particular copper, give him direct experience of financing, developing and operating copper assets and enable him to make valuable contributions on projects, operations, exploration, project financing, sustainable development and health and safety.

Experience:
John has around 30 years' experience in the metals and mining sector mostly acquired with the Anglo American group where he was CEO of Zinc from 2006 to 2009 and CEO of Copper from 2009 to 2013. John founded Mantos Copper in 2015.

Other appointments:
Executive chairman of Mantos Copper, a director of Mantoverde S. A. and chief executive officer of mining at Audley Capital Advisors LLP.

Alison Baker
Independent
Non-executive Director

A N

Appointed to the Board: 2017

Contribution to the Company:
Alison has extensive capital markets and emerging markets experience, including in the energy and mining sectors in Kazakhstan and Russia. She has recent and relevant financial experience and has chaired the Audit Committee since 2018.

Experience:
Having nearly 25 years' experience in the provision of audit, capital markets and advisory services, Alison previously led the UK and EMEA Oil & Gas practice at PricewaterhouseCoopers and prior to that the UK Energy, Utilities and Mining Assurance practice at Ernst & Young.

Other appointments:
Non-executive director of Helios Towers plc and Rockhopper Exploration plc.

Charles Watson
Independent
Non-executive Director

H R P A

Appointed to the Board: 2011

Contribution to the Company:
Charles' expertise in major project delivery and past senior management roles encompassing both Kazakhstan and Russia, coupled with his passion in the continued improvement in health, safety and sustainability contributes significant value to the Board.

Experience:
During his 29 years at Shell, Charles held a number of senior global executive positions, culminating in his appointment as executive vice president responsible for Russia and the CIS, including oversight of Shell's activities in Kazakhstan, chairman of Shell Russia and chairman of the board of directors for the Sakhalin Energy Investment Company. He was previously non-executive director of JSOC Bashneft.

Vladimir Kim
Non-executive Director

Appointed to the Board: 2004

Contribution to the Company:
With extensive knowledge of the mining industry, a thorough working knowledge of the CIS and an exemplary understanding of the political and regulatory environment in Kazakhstan, Vladimir brings valuable Kazakh mining experience and continues to perform a vital role in assisting and supporting the Company in its dealings with the Government and local authorities in Kazakhstan.

Experience:
Vladimir joined the Group in 1995, when he was appointed managing director and chief executive officer of Zhezkazgantsvetmet JSC and was elected chairman of that company in 2000. He was appointed Chairman of KAZ Minerals in 2005 prior to its listing on the London Stock Exchange. Vladimir stepped down as Chairman in 2013 but remains on the Board as a non-executive Director.

Other appointments:

- A Audit Committee
- H Health, Safety and Sustainability Committee
- R Remuneration Committee
- P Projects Assurance Committee
- N Nomination Committee
- ● Chair

GOVERNANCE FRAMEWORK

Code compliance

This section has been prepared in accordance with the July 2018 edition of the UK Corporate Governance Code, which applies to the Company's Annual Report and Accounts for the year ended 31 December 2019 and is available in full at www.frc.org.uk. It is the Board's view that for the year ended 31 December 2019, the Company complied with all the provisions set out in the Code apart from provision 9, which applies to the appointment of a former chief executive as chair of the same company, which is explained in more detail in the Nomination Committee section on page 93.

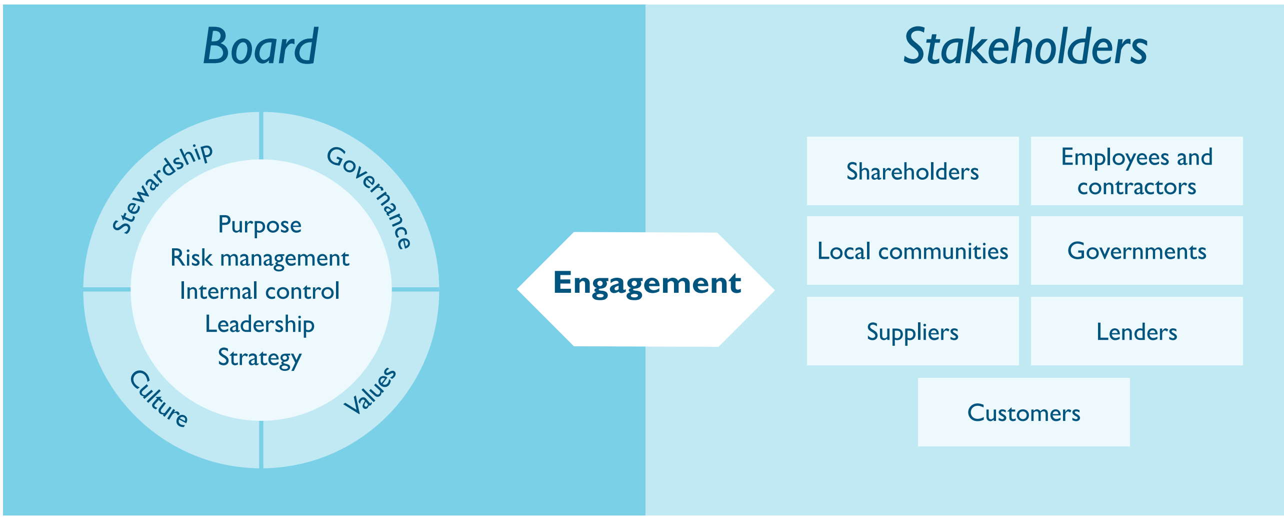
Leadership

The role of the Board

The Board is accountable to shareholders for managing the Company in a way which promotes its long-term sustainable success. It ensures that there is a complementary balance in strategy between promoting long-term growth and delivering short-term objectives, with due regard to risk.

The Board is primarily responsible for the Company's purpose, values, strategic direction and leadership, evaluating and managing risk and ensuring internal controls are in place. Its overriding duties are to run the Company as stewards for the Company's stakeholders, with good governance, strong values and a safety-driven and ethical culture.

There is a formal schedule of matters specifically reserved for the Board's decision which is reviewed regularly, a summary of which is set out below. These matters are significant to the Group as a whole because of their potential strategic, financial and reputational implications and impact on stakeholders. The Board discharges some of its responsibilities directly and others through its Committees and through management. The Board currently has five Committees to deal with specific aspects of the Group's affairs. The Chair of each Committee provides reports to the Board on the matters discussed at each Committee meeting to ensure that all Directors have visibility of and the opportunity to discuss, the matters being considered by each Committee.



Matters reserved for the Board

Key matters reserved for the Board include the approval of:

- the Group's strategy and business plans;
- material restructurings or reorganisations, including major acquisitions, mergers and disposals and changes to the Group's capital structure;
- major Group financing, major capital expenditure and projects;
- the annual production plan and financial budget;
- the Company's dividend;
- Health, Safety and Sustainability policies, Anti-Bribery and Corruption Code and Share Dealing Rules;
- the framework for the management of the Group's principal risks;
- the appointment and removal of Directors or the Company Secretary;
- the annual performance evaluation of the Board, its Committees and individual Directors;
- annual and half-yearly reports, circulars and other shareholder documents and the principal regulatory filings with stock exchanges;
- consideration of any significant contracts outside the ordinary course of business, in which a related party is interested; and
- the appointment or removal of the Company's external auditors and key corporate advisers.

The full schedule of matters reserved for the Board is available on the Company's website (www.kazminerals.com).

Roles and Responsibilities

Division of responsibilities

There is a clear division of responsibilities between the Chair, Chief Executive Officer and Deputy Chair. These roles and those of the other Directors are clearly defined so that no single individual has unrestricted powers of decision. The roles and responsibilities of the Board were reviewed during 2019 and it was agreed that they remained appropriate.

A summary is set out below:

Chair
Oleg Novachuk

The key roles and responsibilities include:

- leadership of the Board;
- developing appropriate Group objectives, plans, policies and strategies with delegated authority from the Board and ensuring that these are implemented by the Chief Executive Officer to build a sustainable business for the long term;
- ensuring effective communication with shareholders, major customers, strategic and commercial partners, regulators, host governments and other relevant stakeholders to maintain stakeholder confidence in the management of the Company;
- leadership and oversight on all health, safety and sustainability matters in the countries in which the Group operates; and
- ensuring the Board determines the nature and extent of the principal risks the Group is willing to take to achieve its strategic objectives.

Chief Executive Officer
Andrew Southam

The key roles and responsibilities include:

- responsibility for the executive management of the Group and leading the senior management team in the day-to-day running of the Group's business;
- timely implementation of agreed strategy;
- planning human resourcing, staff development and management succession;
- together with the Chair, overseeing compliance of the Group's operations with all relevant health and safety standards with special regard to environmental and social concerns;
- ensuring the Group's risk profile is managed in line with limits which are deemed acceptable by the Board and that an effective framework of internal controls and risk management is maintained; and
- recommending to the Board appropriate annual budgets and medium-term financial and production plans and ensuring they are achieved.

Deputy Chair and Senior Independent Director
Michael Lynch-Bell

The key roles and responsibilities include:

- leading on Board governance matters including the annual review of Board effectiveness;
- chairing the Nomination Committee;
- promoting effective and constructive relationships and communication between non-executive Directors and executive Directors and senior management;
- acting as a sounding board for the Chair and ensuring that the other Directors have an intermediary through him when necessary;
- being the point of contact for shareholders and other stakeholders to discuss matters of concern which would not be appropriate through the normal channels of communication with the Chair, Chief Executive Officer and Chief Financial Officer. No such matters of concern were raised during 2019; and
- meeting with a range of major shareholders when required on governance matters, reporting the outcome of such meetings at subsequent Board meetings.

Independent non-executive Directors

The key roles and responsibilities include:

- providing an independent external perspective to the deliberations of the Board, drawing on their experiences from their careers in other businesses;
- constructively challenging the strategies proposed by the executive Directors and scrutinising the performance of management in achieving agreed goals and objectives;
- monitoring the Group's risk profile;
- playing a key role in the functioning of the Board and its Committees; and
- providing between them an appropriate balance of skills, experience, knowledge and independent judgement.

Corporate governance framework

Shareholders

Approving formal matters and providing ongoing communication

Board of Directors

Promoting the long-term sustainable success of the Company, monitoring its culture, engaging with stakeholders and setting the Group purpose, values and strategy. Determining the risk appetite and overseeing risk management, internal control and corporate governance

Nomination Committee

Reviewing the composition of the Board and its Committees, including succession planning for the Board and senior management to ensure a diverse pipeline for succession

Remuneration Committee

Setting and implementing the Board remuneration policy and determining the remuneration of executive Directors and the next level of senior management to support Group strategy, purpose and values and to promote the Group's long-term success

Health, Safety and Sustainability Committee

Developing and overseeing a framework of HSS policies and standards to support the Group's culture and to manage risk

Audit Committee

Reviewing the integrity of financial reporting, internal controls and assurance processes and the work of the internal and external auditors

Projects Assurance Committee

Monitoring the Aktogay expansion and the Baimskaya copper project

Chief Executive Officer

Overseeing the implementation of the strategy determined by the Board

Executive Committee

Supporting the Chief Executive Officer in the day-to-day running of the Group, implementation of strategic objectives and operation of the risk management framework

Effectiveness

Composition of the Board

The Board is currently comprised of the Chair, Chief Executive Officer, and six non-executive Directors (including the Deputy Chair). The balance of Directors on the Board ensures that no individual or small group of Directors can dominate the decision-making process and that the interests of minority shareholders are protected. Biographies of all Directors are set out on pages 76 and 77.

The Board carries out a review of the independence of its non-executive Directors on an annual basis and is satisfied that, other than Vladimir Kim, each of its non-executive Directors is independent in character and judgement. In reaching its determination of independence, the Board has concluded that each of Lynda Armstrong, Alison Baker, Michael Lynch-Bell, John MacKenzie and Charles Watson provides objective challenge to management. None of them has any business or other interests which are likely to, or could appear to, affect their judgement in their capacity as Director of the Company and therefore, in accordance with the Company's policy, over half the Board excluding the Chair, is comprised of independent non-executive Directors.

Commitment

Directors are expected to attend every Board meeting and every meeting of any Committee of which they are a member unless there are exceptional circumstances preventing their attendance. Scheduled Board and Committee meetings are arranged at least a year in advance to allow Directors to manage other commitments.

Directors are provided with the relevant Board or Committee papers for consideration around seven days in advance of each meeting via an electronic board portal.

If a Director is unable to attend a meeting due to exceptional circumstances, he or she still receives the papers in advance of the meeting and has the opportunity to discuss with the relevant Chair or the Company Secretary any matters he or she wishes to raise and to follow up on the decisions taken at the meeting. The Chair, Chief Executive Officer, Deputy Chair and Company Secretary are always available to discuss issues relating to meetings or other matters with the Directors. Reasons for non-attendance are generally prior business or personal commitments that cannot be re-arranged, or illness.

The number of scheduled Board meetings which each Director was eligible to attend and the number of meetings attended during 2019 is shown below:

Directors during 2019	Attendance at scheduled meetings during 2019
Oleg Novachuk	6/6
Andrew Southam	6/6
Lynda Armstrong	6/6
Alison Baker	6/6
Vladimir Kim[1]	4/6
Michael Lynch-Bell	6/6
John MacKenzie	6/6
Charles Watson	6/6

1 Mr Kim missed two Board meetings due to conflicts in schedules arising from his commitments with the Government of Kazakhstan. He provided any comments to the Deputy Chair or Company Secretary on matters to be discussed in advance of the meetings he missed.

In addition to the six scheduled meetings of the Board during the year, two further meetings were held which focused on the review of the Group's strategy and associated principal risks and the completion of the acquisition of the Baimskaya copper project.

Development

On appointment, all new Directors receive a comprehensive and structured induction, tailored to their individual requirements. The induction programme, which is arranged by the Company Secretary, includes visits to the Group's businesses and meetings with senior managers and external advisers as appropriate. The programme is designed to facilitate their understanding of the Group, the key drivers of business performance, the role of the Board and its Committees and the Company's corporate governance practices, policies and procedures. It also provides them with appropriate training and guidance as to their duties, responsibilities and liabilities as directors of a public limited company listed on the London and Kazakhstan Stock Exchanges.

To assist Directors in the performance of their duties, there are procedures in place to provide them with appropriate and timely information, including receiving information on Group business development and operational performance between meetings. This enables the Directors to discharge their duties effectively on strategic, financial, operational, compliance and governance issues.

All Directors are provided with the opportunity for, and encouraged to attend training to ensure they are kept up to date on relevant legal, financial and industry developments or changes in best practice. Typical training for Directors includes internal briefings, attendance at seminars, forums, conferences, external training courses and working groups, the receipt of written and verbal updates from relevant bodies or external advisers on legal, regulatory and governance matters as well as internal training sessions delivered by management or external consultants at Board meetings or during site visits.

Culture

The Board oversees corporate culture and receives updates from the Group Director of Human Resources on the Group values programme and the way in which our values are embedded in operations. Through engagement with our stakeholders and Committee reports, especially the Audit Committee, the Health, Safety and Sustainability Committee and the Remuneration Committee, we receive a good insight into the culture of our people at all levels of the business and of the initiatives put in place by management to continually improve it. Culture is important to us to ensure we remain an attractive and inclusive employer for our people and a trusted business partner for our customers, suppliers and lenders.

Stakeholder engagement

The Board understands its duties to promote the success of the Company under section 172 of the Companies Act 2006 and the core role that the Group's stakeholders have in our success, as well as the impact of our decisions on them. For a summary of our current stakeholders as well as the engagement that has taken place across the business in 2019, please see the Strategic report pages 16 to 19. For information on workforce engagement see page 86 of this section.

Information and support

The Company Secretary is responsible for advising the Board on all governance matters and for ensuring that Board procedures are followed, applicable rules and regulations are complied with and that due account is taken of relevant codes of best practice. The Company Secretary is also responsible for ensuring communication flows between the Board and its Committees, and between senior management and non-executive Directors. All Directors have access to the advice of the Company Secretary and in appropriate circumstances, may also obtain independent professional advice at the Company's expense. The appointment and removal of the Company Secretary is a matter reserved for the Board. The Company Secretary is Susanna Freeman, who joined the Group in 2014. She is admitted as a solicitor in England and Wales.

Performance evaluation

The effectiveness of the Board is integral to the success of the Company and therefore an in-depth evaluation is carried out every year. In compliance with the provisions of

BOARD ACTIVITIES DURING 2019

Regular agenda items included updates on:

- Health, safety and sustainability
- Cash forecasts
- Operations
- Capital and financial performance and requests for capital expenditure
- Business development projects and strategic matters
- Principal risks and risk management processes
- Changes in corporate governance
- Corporate communications and investor sentiment

Regular updates from Chairs of the Group's Committees

- Audit
- HSS
- Projects Assurance
- Nomination
- Remuneration Committees

Board strategy

- Approved Group strategy and received presentations and reports from management on strategy execution and performance against the 2019 plan
- Held an annual strategy session to review and set the Group strategy

Operations

- Received updates on production and operational issues at the Group's assets
- Reviewed statistics on global supply and demand for our products
- Regularly reviewed progress against the Group's KPIs
- Received updates and forecasts on commodity prices

Culture

- Approved the new Group Purpose statement
- Reviewed the Group's succession planning and diversity strategy
- Received presentations on the workforce from the Group Director of Human Resources

Strategic decisions

- **Completion of Acquisition of the Baimskaya Copper Project**
  Approved of Initial Completion of the transaction following satisfaction of the conditions precedent under the acquisition agreement for the Baimskaya copper project
- **Caterpillar Credit Facility**
  Approved of signing of a new term loan credit facility of up to $100 million with Caterpillar Financial Services (UK) Limited
- **Credit facility with the Development Bank of Kazakhstan JSC ('DBK')**
  Approved the entry into a $600 million credit facility with DBK. The DBK facility provides financing for the Group's Aktogay expansion project

Key:

Shareholders | Customers | Suppliers | Local communities | Employees and the wider workforce | Governments | Lenders the Code, an externally facilitated annual performance evaluation of the Board and its Committees is carried out every three years, with internal annual performance evaluations carried out for the intervening years. In 2018 we conducted an externally facilitated annual performance evaluation of the Board and its Committees and the next external evaluation will be carried out in 2021.

During 2019, an internal performance evaluation of the Board and its Committees was carried out, led by the Deputy Chair and facilitated by the Company Secretary. A detailed questionnaire on the performance of the Board was circulated and completed by the Directors, with the focus of the evaluation amongst other things on:

- the size, composition and role of the Board;
- assessment of strategy, risk and internal control;
- Board arrangements and effectiveness of Board Committees; and
- succession planning.

Based on the responses received and in consultation with the Deputy Chair, the Company Secretary prepared a report which was presented to the Board by the Deputy Chair in December 2019. The overall conclusion of the evaluation was that the Board and its Committees were operating effectively with a good dynamic and range of skills. The Board was stated to have provided a sufficient degree of challenge on key decisions and to have a high degree of understanding of the matters facing the Group. Certain areas that could potentially be improved were identified, including enhancing training provision for the Board and a continued focus on Board and senior management succession planning including improvement of diversity on the Board. These recommendations are being incorporated into the Board and Committee processes for 2020.

During the year, the Deputy Chair held a number of meetings with non-executive Directors without executive Directors being present. He led the non-executive Directors in evaluating the performance of the Chair as part of the Board evaluation process, following which the Board was satisfied that Oleg Novachuk continued to be able to fulfil all of the commitments required of the role to its satisfaction.

Corporate governance

- Discussed regular updates from Board Committees and management on legislation and proposed consultations that may affect the Group's regulatory obligations
- Confirmed Directors' independence and conflicts of interests
- Reviewed and approved the Modern Slavery Statement
- Approved updates to policies
- Updated matters reserved for the Board
- Agreed updated terms of reference for Committees
- Conducted an internally facilitated Board evaluation

Sustainability

- Approved the sustainability strategy
- Received an update on the sustainability key performance indicators

Stakeholder engagement

- Carried out and reviewed stakeholder mapping
- Received updates on all stakeholders including a presentation from the Group Procurement Director on the supply chain, updates on the political environments in Russia and Kazakhstan from the Chair and from third-party experts, a presentation from the Group's brokers on investor sentiment, a presentation on the workforce from the Group Director of Human Resources and sustainability updates from the Chief Executive Officer and Group Head of Investor Relations
- Received reports from the Designated non-executive Director for the workforce

Capital projects

- Received reports on capital projects, including Aktogay expansion project, Artemyevsky mine expansion and Baimskaya copper project, and progress against key milestones and budget

Financial reporting and controls, capital structure and dividend policy

- Considered performance against the 2019 budget and approved the 2020 budget
- Monitored the Group's financial performance
- Reviewed the Group's dividend policy and approved the final and interim dividend
- Assessed the Group's capital and liquidity requirements, arising from Group strategy
- Approved the full year and half-yearly results and Annual Report and Accounts

Risk Management

- Received updates on and agreed the Group's significant risks and emerging risks

Re-election

Directors newly appointed by the Board, are required to submit themselves for election by shareholders at the Annual General Meeting following their appointment. In accordance with best practice and the Code, all current Directors will be submitted for re-election at the forthcoming Annual General Meeting.

Vladimir Kim (non-executive Director) and Eduard Ogay (former executive Director of the Company), are deemed to be acting in concert with each other by the Panel on Takeovers and Mergers and to constitute a Concert Party for the purposes of the City Code on Takeovers and Mergers. Under the Listing Rules, a Concert Party is classed as a 'controlling shareholder' of the Company. This means that the independent non-executive Directors of the Company, must be elected or re-elected by a majority of votes cast by independent shareholders. Therefore, at the forthcoming Annual General Meeting, the resolutions for the re-election of the independent non-executive Directors will be taken on a poll and passed only if a majority of votes cast by independent shareholders (which excludes Vladimir Kim and Eduard Ogay), in addition to a majority of the votes cast by all shareholders, are in favour.

Conflicts of interest

Directors have a statutory duty to avoid situations in which they have or could have a direct or indirect interest that conflicts or may conflict with the interests of the Company. The Company's Articles of Association give the Directors authority to approve such situations and there is no breach of duty by a Director if the relevant situation has been authorised in advance. In addition, a Director has a duty to disclose to the Board any transaction or arrangement under consideration by the Company, in which he or she has a personal interest.

Directors are required to declare all directorships or other appointments outside the Group which could give rise to an actual or potential conflict of interest. Only the independent Directors are able to authorise such conflict situations and, where appropriate, this authorisation may be subject to certain conditions. Directors are also required to declare if there are any changes in circumstances that may affect an existing authorisation and they need to seek permission from the Board before accepting any external appointments. The Company Secretary minutes the consideration of any actual or potential conflict of interest and any authorisation granted and maintains a register of this information.

The Company's Articles of Association also include provisions relating to the treatment of third-party confidential information received by a Director and the circumstances in which a Director should absent himself or herself from a Board meeting and refrain from reviewing Board papers in relation to a matter in which he or she has an actual or potential conflict. These provisions will only apply where the circumstance giving rise to the potential conflict of interest has previously been authorised by the Directors.

Anti-Bribery and Corruption ('ABC')

The Group has in place an ABC Compliance Programme (the 'Programme') to assist in the prevention of unlawful activities by individuals or Group entities and to comply with the requirements of the UK Bribery Act 2010. The Board has a firm stance on bribery and corruption and attaches the utmost importance to the Programme in clarifying the standards expected of all employees of the Group, wherever it conducts business.

The foundation of the Programme is the ABC Code, below which there is a subset of policies which provide a process for operating in accordance with the Programme in specific situations, including at the Group's Russian operations. These policies include the process for dealing with public officials, the giving and receipt of gifts and hospitality, due diligence processes to be carried out on third-party business partners and policies on conflicts of interest, lobbying, social investment and Speak Up. Regular training in ABC and awareness campaigns are carried out across the Group and monitoring and assurance of processes is carried out by the Internal Audit team and by external advisers. Anti-bribery and corruption clauses are included in contracts with the Group's business partners.

The Group undertakes due diligence on potential suppliers, customers, consultants, agents, distributors and other business partners to check they are suitable to do business with, are reputable and ethical and do not commit or engage in any form of bribery or corruption. New business partners complete an ABC questionnaire in which they need to include two business referees amongst other information. If the Group has a continued relationship with a business partner, the questionnaire is updated periodically.

During 2019, with the integration of our operations in Russia, there was a focus on ABC training in our Russian operations on our Group policies. Existing employees received refresher training and online testing was carried out to ensure there was a good understanding of the Programme within the Group. The Group's ABC Policies were reviewed and updated during the year and a number of these policies can be viewed on the Group's website at www.kazminerals.com.

Related party transactions

The Group has in place a policy for the identification of related parties and a process for the approval of any transactions with these parties. Under this policy, all Kazakhmys Holding Group entities are deemed to be related parties due to Vladimir Kim's substantial shareholdings in both the Group and Kazakhmys Holding Group. The list of related parties is regularly reviewed and updated throughout the year and, prior to entering into any related party transactions, an assessment is undertaken to ensure that the proposed transaction is on an arm's length basis and on normal commercial terms. Specific consideration is given to the requirements under the Listing Rules and the Disclosure Rules and Transparency Guidance.

Competition policy

A competition policy is in place to govern any dealings between the KAZ Minerals Group and the Kazakhmys Holding Group and their employees. This policy recognises that the two groups are competitors and its aim is to prevent anti-competitive behaviour. Prior approval is required internally within the KAZ Minerals Group before any Group company enters into any arrangement with a Kazakhmys Holding Group company. No competitively sensitive information can be exchanged between the parties except in relation to a specific business purpose and where suitable controls are in place.

Risk management and internal control

The Board has overall responsibility for risk management and determines the Group's risk strategy, assesses and approves risk appetite and monitors risk exposure consistent with strategic priorities. The Board has established a Group-wide system of risk management and internal control which identifies and enables management and the Board to evaluate and manage the Group's emerging and principal risks.

Due to the limitations inherent in any system of internal control, this system provides robust but not absolute, assurance against material misstatement or loss and is designed to manage rather than eliminate risk. The effectiveness of the Group's system of internal control is regularly reviewed by the Board as is the Group's risk management framework, with specific consideration given to material financial, operational and sustainability risks and controls, with appropriate steps taken to address any issues identified. During 2019, no significant internal control failings were identified.

The Board has authorised the Audit Committee to oversee the risk management framework and the effectiveness of the Group's financial reporting, internal control and assurance systems. Each Board Committee provides updates on any risks considered within its remit when providing regular updates to the Board.

The Board confirms that throughout 2019 and up to the date of approval of this Annual Report and Accounts, there have been rigorous processes in place to identify, evaluate and manage the emerging and principal risks faced by the Group, including those that would threaten its business model, future performance, solvency or liquidity, in accordance with Principle O of the Code and the Guidance on Risk Management, Internal Control and Related Financial and Business Reporting published by the Financial Reporting Council. The Group's approach to risk management, the risks identified and how it profiles these risks, is set out in the Risk management overview and Principal risks section on pages 66 to 72.

Diversity

KAZ Minerals endeavours to create a positive, supportive and inclusive culture. We promote our corporate values of teamwork, integrity, long-term efficiency, professional development and safety and we strongly believe in the importance of diversity and equality in our workforce which enables the business to draw from a wide range of thought, experience and expertise. The KAZ Minerals workforce represents all sectors of society and reflects the communities local to its operations. We do not discriminate between our employees on the basis of age, gender, race, nationality or ethnic origin, family situation, religion, language, political beliefs, sexual orientation, pregnancy, maternity or paternity or disability ('protected characteristics') except as may be required to comply with applicable laws and regulations, including those relating to employment and health and safety, in the countries in which we operate. We endeavour to ensure a fair and consistent approach in the recruitment and employment of our people regardless of their differences and we do not tolerate any form of unlawful or unfair discrimination, victimisation or harassment based on protected characteristics, whether direct or indirect.

Our approach is set out in the Company's Diversity and Equality Policy which applies to all our staff. It is particularly relevant to Directors, line managers and other employees and contractors concerned with the recruitment, training and promotion of staff and with any employment matters which relate to others. The Group Director of Human Resources is responsible for ensuring that the policy is applied and the Group Human Resources team is trained in and ensures awareness amongst managers of the provisions of the policy and of their obligation to comply with them.

During 2019, a series of meetings with female employees was held at various Group sites in Kazakhstan and these were attended by the Group Director of Human Resources and the Deputy Chair with the aim of understanding better any issues that these employees may face in the workplace and ways in which we can improve gender diversity within the Group, especially at our remote operations where it is more challenging to recruit female staff. There was an additional meeting this year at Bozshakol, one of our remote sites, between a group of female employees of different levels of seniority and several non-executive Directors. The Directors listened to the views of the female employees, asked them questions and discussed ways in which their experience could be improved.

In this year's Hampton Alexander Review, the Company was scored in third place amongst FTSE 350 mining companies for females on the Board and in senior roles, with statistics of 25% women on the Board and 27.9% women on the Executive Committee and direct reports to Executive Committee members (excluding administrative staff). We have a number of initiatives in place across the Group to improve diversity, one of which is our work with the Government of Kazakhstan to open up to women professions which are currently prohibited, such as haulage truck operators. We have also improved facilities at our sites to include for example female gym rooms. For further information on diversity and the initiatives we have in place see the Sustainability report on page 60.

Workforce Engagement

We have appointed a Designated non-executive Director for the workforce, as our channel for direct employee engagement with the Board. Michael Lynch-Bell, our Deputy Chair, is the first Director to take on this role. During 2019 he made two site visits to our operations in Kazakhstan. The first one was to the Nikolayevsky concentrator in the East Region, where he met our employees and union representatives to fully understand the views of our workforce on working conditions and on the Company's strategy and purpose. He fed these views back to the Board for consideration in Board discussions. As part of this trip he also visited the Ust-Kamenogorsk Multidisciplinary Technical College where KAZ Minerals offers grants to students and has renovated the training classrooms with modern technological equipment to invest in education and attract a local skilled workforce.

At the Aktogay expansion project Michael Lynch-Bell met apprentices from our apprenticeship scheme, welcomed them to the Group and discussed their experiences. The scheme gives graduates from local communities practical work experience at our modern sites, focusing our recruitment on areas which are close to our operations to benefit the local area and to reduce staff travel time to our sites. During his visits to our operations, Michael Lynch-Bell discussed with local management and with the Group Director of Human Resources, ways in which the Group could improve diversity and the overall employee experience and reduce staff turnover. He will remain in this role during 2020.

We place significant importance on the training and development of staff in technical skills, health and safety, our values and our governance policies and we aim to improve staff wellbeing, especially at our remote sites Bozshakol and Aktogay where we provide sports facilities and have introduced clinical psychologists with dedicated facilities.

For fuller details of the many ways in which we engage with our employees see pages 59 to 61 of the Sustainability report where information can be located on employee consultation and communication, staff pay and benefits, training and retention and diversity and equality. Case studies are also available to view in the ESG section of our website at www.kazminerals.com.

Relations with shareholders

The Board endeavours to ensure good communication with its shareholders and maintains an active dialogue with its key financial audiences including institutional shareholders, sell-side analysts, private individuals and potential new shareholders. The Head of Investor Relations is in communication with shareholders on a day-to-day basis and the Chief Executive Officer and Chief Financial Officer are closely involved in investor relations activities at key times throughout the year. The Board is provided with shareholder and broader market feedback from the Head of Investor Relations at each Board meeting. The Company's brokers also met with Directors to provide market feedback.

The executive Directors are available, through the Head of Investor Relations, to discuss the concerns of major shareholders at any time and the Deputy Chair is available to discuss governance. Non-executive Directors make themselves available to attend meetings with shareholders when requested in order to develop an understanding of their views. The Company responds as necessary to requests it receives from individual shareholders on a wide range of issues.

Senior management has regular contact with key institutional shareholders, external financing providers and sell-side analysts to discuss the strategy, financial performance and investment activities of the Group. Meetings with management are also supplemented by visits to the Group's operations. During 2019, executive Directors and senior management held meetings with institutional investors in the United Kingdom, continental Europe, Russia and the United States of America and attended conferences in these locations, providing a comprehensive dialogue with shareholders and potential new investors.

During 2019, the Company issued quarterly production updates in January, April, July and October. These, together with copies of analyst presentations each half year, the Group's preliminary and half-yearly results and all announcements issued to the London Stock Exchange, are available on the Company's website (www.kazminerals.com). In addition, users of the Company's website can register to hear live webcasts of the results presentations.

Annual General Meetings

The Notice of Annual General Meeting is circulated to all shareholders at least 20 working days prior to such meeting and it is Company policy not to combine resolutions. All shareholders are invited to attend the Annual General Meeting where there is an opportunity for individual shareholders to question the Chair, Chief Executive Officer and Deputy Chair and, through them, the chairs of the principal Board Committees. After the Annual General Meeting, shareholders can meet informally with the Directors.

At the Annual General Meeting, the Chair provides a brief summary of the Company's activities for the previous year to shareholders. All resolutions at the 2019 Annual General Meeting were voted on by way of a poll. The procedure for voting on a poll follows best practice and allows the Company to count all votes rather than just those of the shareholders attending the meeting.

As recommended by the Code, all resolutions proposed at the 2019 Annual General Meeting were voted separately and the voting results, which included all votes cast for, against and those withheld, together with all proxies lodged prior to the meeting, were announced to the London Stock Exchange and made available on the Company's website at www.kazminerals.com as soon as practicable after the meeting. As in previous years, the Form of Proxy clearly advised that a 'vote withheld' is not a vote in law and is not used in calculating the votes for or against a resolution.

Board Committees

The five Committees of the Board are the Audit; Health, Safety and Sustainability; Nomination; Remuneration and Projects Assurance Committee. Board Committee members are appointed by the Board upon the recommendation of the Nomination Committee, which reviews the composition of each Committee regularly. In accordance with their specific skills and experience, independent non-executive Directors are appointed to different Board Committees.

Committee members are expected to attend each Committee meeting, unless there are exceptional circumstances which prevent them from doing so. Only members of the Committees are entitled to attend Committee meetings, but others may be invited to attend.

The terms of reference of each Committee are reviewed annually and are available to view on the Company's website (www.kazminerals.com). They can be obtained on request from the Company Secretary at the Company's registered office.

Board Committee membership

The current membership of the Board's Committees is shown on page 75.

AUDIT COMMITTEE

Dear shareholder,

As Chair of the Committee, I am pleased to present this report for the year ended 31 December 2019. The following pages explain our work and the key matters we considered over the course of the year.

I would like to thank my fellow Committee members, Michael Lynch-Bell, John MacKenzie and Charles Watson, whose contributions and support have enabled the Committee to perform its duties effectively.

The Audit Committee reports to the Board on its assessment of effective governance in financial reporting, internal control and assurance processes and on the procedures in place for the identification and management of risk. In 2019, the Committee continued to focus on the integrity of the Group's financial reporting, including significant estimates and judgements, as well as monitoring the effectiveness of the Group's system of internal control and risk management and overseeing the relationship with the external auditors and the Internal Audit function.

The Committee has also overseen management's roll out of internal controls at its new Russian operations following the acquisition of the Baimskaya copper project earlier this year, including a review of updates to the Group's ABC and compliance policies appropriate for this new jurisdiction.

Over the next 12 months, the Committee, in addition to its usual duties will assess the policy package of audit reforms that are expected to be presented by government and the new audit regulator. A strong, high quality regulator will be good for audit quality and it remains our key priority that we maintain the integrity of our financial statements and that we have a high quality audit process.

We seek to respond to shareholders' expectations in our reporting and, as always, welcome any feedback. I will be at the Annual General Meeting to answer any questions relating to the work of the Committee.

Alison Baker
Chair, Audit Committee

> "The Committee has overseen management's roll out of internal controls at its new Russian operations following the acquisition of the Baimskaya copper project earlier this year"

Composition

The current members of the Committee are:

Alison Baker, Chair;
Michael Lynch-Bell;
John MacKenzie; and
Charles Watson

Alison Baker has recent and relevant financial experience, having spent nearly 25 years in the provision of audit, capital markets and advisory services in the extractives sector. She previously led the UK and EMEA Oil & Gas practice at PricewaterhouseCoopers and prior to that the UK Energy, Utilities and Mining Assurance practice at Ernst & Young. Michael Lynch-Bell, who chaired the Committee until June 2018, also has recent and relevant financial experience, having spent 38 years with Ernst & Young developing and later leading its global mining and energy practices. John MacKenzie, former CEO of copper at Anglo American plc between 2009 and 2013, has around 30 years' experience in the metals and mining industry and Charles Watson has over 30 years' experience in the extractives industry, including 29 years at Shell. Accordingly, the Board considers that the Committee as a whole has competence relevant to the mining sector.

The Chair of the Board, Chief Executive Officer, Chief Financial Officer, Company Secretary, Head of Internal Audit and the external auditor are usually invited to attend Committee meetings. At the end of each meeting the Committee meets separately with representatives of the external auditors and the Head of Internal Audit, without management being present, to discuss any matters arising from their audits or in relation to any other matter.

Role and responsibilities

The primary responsibilities of the Committee are set out on the pages that follow. Whilst the Committee has specific duties which are set out in its terms of reference, its overarching purpose is to ensure that shareholders' interests are properly protected in respect of the Company's financial management and reporting. The Committee regularly updates the Board on matters discussed at its meetings. The Board has delegated responsibility to the Committee for monitoring the Company's procedures and system of internal control in relation to risk management and the Committee oversees the internal and external audit processes which report into it.

Key roles and responsibilities of the Audit Committee include:

- monitoring and challenging, where necessary, the integrity of the financial statements, the annual and half-yearly results, and any other formal announcement relating to the Group's financial performance, including a review of significant financial reporting judgements which they contain;
- reviewing and challenging, where necessary, the actions and judgements of management taking into account the views of the external auditors in relation to the Company's Financial statements, Strategic report, Financial review, Directors' report (insofar as it relates to audit and risk management), half-yearly reports, preliminary announcements and related formal statements, including the going concern assumption and the viability statement;
- reviewing the Company's internal controls, including financial controls and risk management systems;
- approving the annual and three-year internal audit plans and monitoring the role and effectiveness of the Internal Audit function;
- overseeing the Company's relationship with the external auditors, including the monitoring of their independence and expertise, the terms of their engagement and fees, and assessing the effectiveness of the audit process with due regard to relevant UK professional and regulatory requirements;
- agreeing the scope of the external auditors' annual audit plan and reviewing the output;
- reviewing and approving any changes to the policy on the provision of non-audit services by the external auditors;
- reviewing the content of the Annual Report and Accounts and advising the Board on whether, taken as a whole, it is fair, balanced and understandable, is consistent with the financial statements and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy;
- assessing annually the Committee's own performance, constitution and terms of reference; and
- reporting to the Board on how the Committee has discharged its responsibilities.

A copy of the Committee's terms of reference is available to view on the Company's website (www.kazminerals.com)

External auditors

KPMG were appointed as external auditors of the Group in 2012 following a formal competitive tender process and continue to be the Company's external auditors.

The appointment of KPMG is reviewed annually and the Committee has assessed the quality and effectiveness of the external audit process during the year, with consideration given to the performance, objectivity, independence, resource and relevant experience of KPMG. The Committee's assessment incorporates feedback from the auditors on their own performance, management's assessment of KPMG's effectiveness based on a detailed survey of senior finance personnel across the Group, as well as the KPMG audit quality inspection report issued by the FRC.

The external auditors regularly update the Committee on a number of matters, including their review of management's going concern assessment and significant judgements and estimates used in the preparation of the financial statements. In addition, the Committee ensured that the

Attendance at Audit Committee meetings

During 2019, there were nine scheduled meetings of the Audit Committee, including four meetings which were convened to discuss one item of business only, the financial and narrative disclosures in the Group's production reports, with each member attending as shown below:

Members during 2019	Committee member since	Attendance at scheduled meetings during 2019
Alison Baker	9 October 2017	9/9
Michael Lynch-Bell	27 February 2013	8/9
John MacKenzie	1 January 2016	9/9
Charles Watson	24 August 2011	9/9

Michael Lynch-Bell missed one meeting due to a conflict in his schedule. He provided any comments to the Committee Chair on matters to be discussed in advance of the meeting he missed.

external auditors were focused on certain areas pertinent to 2019, including a review of the accounting for the Group's ICG joint venture and the acquisition of Baimskaya. The Committee conducts a thorough review of any audit matters arising and is satisfied that the level of challenge provided by the external auditors was appropriate.

The Committee agreed that the Group continues to benefit from the insight and knowledge applied by the external auditors and recommended to the Board the re-appointment of KPMG. Following the Committee's recommendation, the Board has approved resolutions to be proposed at the forthcoming Annual General Meeting, to re-appoint KPMG as the Company's external auditors and to authorise the Directors to set KPMG's remuneration.

In accordance with regulations on tendering audit contracts at least every 10 years, it continues to be the intention of the Committee that the external audit will be put out to tender by 2022 at the latest, subject to any further regulatory change.

Policy on the provision of non-audit services

The Committee is responsible for reviewing the Group's policy on the use of the external auditors for non-audit services. The policy identifies those non-audit services which may, and those which may not, be provided and sets out the process through which non-audit services must be approved. Under the policy, the external auditors can only be used for non-audit services where there are benefits to the Group and the provision of such services will not threaten the external auditors' independence and objectivity.

Under the policy, any new engagement for non-audit services in excess of £100,000 must be approved by either the Chief Financial Officer and the Committee Chair or a sub-committee of any two Committee members and certain engagements must additionally be subject to a competitive tender process. During 2018, KPMG informed the Audit Committee that with effect from 1 January 2019 they would not undertake any non-audit services with the exception of services closely related to the audit.

Full information on engagements and total annual fees paid for non-audit services are reported to the Committee. There were no fees paid to KPMG for non-audit services in 2019 other than the half-year review, which is considered to be closely related to the audit. Details of all fees paid to the external auditors for the year ended 31 December 2019 and information on the nature of non-audit fees appear in note 11 to the consolidated financial statements on page 145.

Internal Audit

Internal Audit provides independent, objective assurance to the Group, designed to improve the Group's operations and safeguard the Group's assets and integrity. It advises management on the extent to which systems of internal control and governance processes are appropriate and effective to manage business risk, safeguard the Group's resources and maintain compliance with the Group's policies and legal and regulatory requirements. It advises on ways in which areas of risk can be addressed and provides objective assurance on risk and controls to senior management, the Audit Committee and the Board. Internal Audit's work is focused on the Group's principal risks; the Head of Internal Audit and the Group Risk function work together when considering the appropriate scope and focus of internal audits. The three year programme of work of the Internal Audit department is considered and approved by the Audit Committee on a rolling annual basis, subject to any additional suggestions from the Committee. The audit plan has space for ad hoc audits as required by the Committee or management.

Under the Internal Audit plan, a number of audits take place across the Group's operations and functions to identify areas for improvement of the Group's internal controls. Findings are reported to relevant operational management who put in place processes for strengthening controls. Internal Audit follows up on the implementation of recommendations and reports on progress to senior management and to the Audit Committee.

The Head of Internal Audit reports regularly to the Chair of the Audit Committee and attends Audit Committee meetings four or five times a year to present the findings from internal audits.

Fair, Balanced and Understandable

The Committee assessed whether the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the necessary information required for shareholders to assess the Company's position and performance, business model and strategy. The Committee reviewed the processes and controls in place for the preparation of the Annual Report and Accounts, taking into account that each section is prepared by a member of management with appropriate seniority, knowledge and experience and who has an understanding that the content must be fair, balanced and understandable and the overall preparation is overseen by the Chief Financial Officer. A paper was presented to the Committee addressing the points of whether the Annual Report and Accounts was fair, balanced and understandable. It considered, among other matters, the fact that the Committee had received a full draft of the Annual Report and Accounts in advance and following a review, provided feedback to management on areas that needed further clarity. Following incorporation of this feedback, the Committee concluded that the Annual Report and Accounts was fair, balanced and understandable and provided the necessary information for shareholders to assess the Group's position, performance, business model and strategy.

Brexit

The Committee, in conjunction with management, considered the effect of Brexit on the Group and its operations.

The Group's operations are located in Kazakhstan, Kyrgyzstan and Russia, with the majority of sales made into China and non-EU countries. The principal business carried out by the Group in the UK relates to its listing on the London Stock Exchange and it maintains a small office in London where corporate functions such as Company Secretarial, Investor Relations and Treasury are located. The Board of Directors and Committee meetings are mostly held at the London office. From a tax perspective, the Group's arrangements are largely subject to bi-lateral agreements between the UK and Kazakhstan; the UK and the Netherlands; and the Netherlands and Kazakhstan, which are generally expected to remain in place post-Brexit.

Taking into account the circumstances of the Group, the Committee does not expect Brexit to have a significant impact on the Group.

Audit Committee Activities in 2019

At its meetings in 2019, the Committee:

Financial reporting

- reviewed the annual and half-yearly results including the quality and acceptability of accounting policies, significant financial reporting estimates and judgements applied in preparing them, the transparency and clarity of the disclosures within them and compliance with financial reporting standards and governance;
- considered whether the Annual Report and Accounts, taken as a whole, was fair, balanced and understandable and provided the necessary information for shareholders to assess the Company's position and performance, business model and strategy;
- received reports from management and the external auditors on accounting, financial reporting, regulatory and taxation matters including adoption of new accounting standards;
- considered impairment indicator reviews performed by management;
- reviewed the methodology for producing the disclosure of ore reserves and mineral resources and other relevant disclosures in the Annual Report and Accounts;
- reviewed the accounting treatment for the Baimskaya copper project acquisition;
- reviewed the basis for preparing the Group accounts on a going concern basis; and
- considered the viability statement to be made by the Company.

Internal control

- reviewed the structure and effectiveness of the Group's system of internal control as set out on page 85 and the disclosures made in the Annual Report and Accounts on this matter;
- received a presentation on the Group's assurance risk mapping framework including a continued assurance map;
- reviewed the internal controls of the operating companies for the Baimskaya copper project;
- reviewed and recommended to the Board, amendments to the Group Treasury Policy;
- reviewed and recommended to the Board the Group Tax Strategy; and
- reviewed the Group's processes for disclosing information to the external auditors and the statement concerning such disclosure in the Annual Report and Accounts.

Risk management

- received an overview of the Group's risk environment and risk management activities together with analysis of the key risks to achieving the Group's strategic priorities;
- reviewed and challenged the Group's top 20 risks identified by management in the Group risk map and movements of those risks over the course of the year;
- reviewed the effectiveness of the Group risk management framework as described on page 66;
- reviewed reports from Internal Audit on issues identified and confirmed that there was an appropriate response from management;
- reviewed reports from the external auditors on any issues identified in the course of their work including the internal controls report; and
- monitored the Group's catastrophic risk insurance arrangements.

Internal audit

- approved the annual and rolling three-year assurance plans; and
- regularly reviewed reports from Internal Audit, received presentations from the Head of Internal Audit on internal control and followed up on the manner in which recommendations made in these audits had been addressed.

External auditors

- approved the terms of engagement of the external auditors, the fees paid and scope of work;
- received reports on the findings of the external auditors during the half-yearly review and annual audit and reviewed the recommendations made to management by the external auditors and management's responses;
- reviewed the performance and effectiveness of the external auditors in respect of the previous financial year and recommended their re-appointment;
- assessed the continued independence and objectivity of the external auditors;
- reviewed the quality assurance processes of the external auditors and letters of representation to them; and
- discussed the procedures performed and issues raised.

Other matters

- reviewed reports on changes to UK, Kazakhstan and Kyrgyzstan tax legislation;
- received the report on payments to governments;
- received reports on matters raised via the Speak Up facilities, the process for the investigation of those matters raised, the outcome of investigations and any related actions taken;
- reviewed status updates on the Group's Anti-Bribery and Corruption Compliance Programme;
- received updates from management on the latest technical accounting, taxation and regulatory issues;
- received a report on IT security;
- received updates on the implementation of a new Oracle Enterprise Resource Planning system;
- received a report on the Group's processes in relation to social investment;
- reviewed the results of the performance evaluation of the Committee; and
- reviewed the training requirements of the Committee members.

Plans for 2020

During 2020, in addition to its usual activities, the Committee will consider the policy package of audit reforms that are expected to be progressed. We will continue to undertake in-depth reviews of any key areas of risk which may impact the business and will pay particular attention to the maintenance of the Group's control environment.

Significant judgements and estimates considered by the Audit Committee

The Committee considered, amongst other matters, a number of significant judgements in relation to the financial reporting of the Group. These are consistent with the prior year.

Significant issues	Committee action
Going concern and viability statement	
It is appropriate to continue to adopt the going concern basis of accounting in preparing the financial statements for the year ended 31 December 2019. In reaching this conclusion, management took into account the financial position of the Group and its forecast cash flows and made certain assumptions and judgements as set out in the basis of preparation note to the financial statements on page 132 to 134 and in the Strategic report on page 41. This Annual Report and accounts also includes the long-term viability statement in compliance with the UK Corporate Governance Code. Management considered the Group's long-term viability statement and prospects, in addition to and together with the going concern statement, which is set out on page 118.	The Committee considered and approved the underlying assumptions, available facilities and headroom, including compliance with banking covenants, used in the preparation of the long-term viability statement, together with the going concern assumption. After reviewing papers prepared by management and also taking into account the external auditors' review of the papers and their comments on the underlying assumptions, the Committee concluded that it was appropriate to prepare the accounts on a going concern basis. The Committee considered the long-term viability statement and going concern statement and, satisfied with the robustness of the review, recommended to the Board the appropriateness of management's disclosures.
Impairments – Group	
For the year ended 31 December 2019, an assessment of impairment indicators or reversals across the Group's cash generating units (CGUs) was performed and this did not identify indicators which would require an impairment or reversal review. Accordingly, impairment reviews of the CGUs were not undertaken. Further details can be found in note 3 to the financial statements on page 135.	The Committee considered management's assessment for the year ended 31 December 2019. The Committee evaluated the appropriateness of management's assumptions, estimates and related disclosures. Having received input from the external auditors, the Committee agreed with management's assessment and disclosures.
Impairments – KAZ Minerals PLC	
An assessment of impairment indicators in respect of the investments of KAZ Minerals PLC was performed, taking into account the movement in the Company's share price in 2019, and no impairment indicators were identified. This conclusion was also supported by the use of consistent methodology used for impairment indicator reviews across the Group's CGUs. An impairment review was therefore not undertaken. Further details can be found in note 3 to the financial statements on page 135.	The Committee considered papers setting out management's impairment indicator review together with the latest internal valuation of KAZ Minerals PLC's investments against the carrying value of $4.2 billion. Having received input from the external auditors, challenged the appropriateness of key assumptions used by management in their value estimates and considered external market valuations of the Group, the Committee agreed with management's assessment and disclosures.
Consideration and assessment of tax matters of the Group	
Due to the evolving nature of tax legislation and its application in Kazakhstan, Kyrgyzstan and Russia, management is required to make judgements and estimates in relation to tax risks, the outcomes of which can be less predictable than in other jurisdictions. Management has determined its best estimates for taxes payable and the likelihood and timing of taxes receivable, including VAT, and accounted for them accordingly. Further details can be found in note 3 to the financial statements on page 137.	The Committee considered papers prepared by management and after receiving input from the external auditors, concluded that the Group's tax position has been appropriately accounted for and disclosed.
Joint arrangement accounting – Industrial Construction Group	
The Group has established a joint arrangement, ICG, for the construction of the additional sulphide processing facility at Aktogay. The Group has a 49 per cent interest in ICG and is deemed to have joint control, as decisions about the relevant activities of the joint arrangement require unanimous consent of the parties. Further details can be found in note 3 to the financial statements on page 137.	The Committee considered papers prepared by management and taking into account the external auditors' review of the papers and their assumptions, concluded that management's judgement relating to the accounting of ICG was appropriate.
Acquisition accounting – Baimskaya copper deposit	
The Group announced the completion of the acquisition of the Baimskaya copper project in January 2019. In determining the appropriate accounting for the purchase, consideration was given as to whether the deposit represented a business, as defined under the accounting standards, or an asset. As the copper project is in the exploration stage prior to feasibility, the work undertaken to date was considered to be an assessment of its inputs rather than the existence of inputs and processes capable of generating an output. As such, the acquisition was judged to be an asset and not a business as defined under IFRS 3. Further details can be found in note 5(a) to the financial statements on page 142.	The Committee considered papers prepared by management and taking into account the external auditors' review of the papers and their assumptions, concluded that management's judgement in respect of the acquisition accounting for the Baimskaya copper project was appropriate.

NOMINATION COMMITTEE

Dear shareholder,

The current structure of the Board has been in place for two years now and I consider it to be effective, with good governance, as we seek to deliver the Group's growth strategy for the benefit of all stakeholders.

At the beginning of 2018, after consultation with our major institutional shareholders, the Board appointed Oleg Novachuk, previously Chief Executive Officer, as Chair of the Company. The Board considered him to be uniquely qualified for the role due to his operational knowledge, project development expertise and relationships with industrial, financial and political leaders in Kazakhstan, China and the region. Andrew Southam, previously Chief Financial Officer, was appointed our new Chief Executive Officer and I was appointed Deputy Chair, in addition to my role as Senior Independent Director, with responsibility for Board governance. John Hadfield was recruited to be the new Chief Financial Officer.

During 2019, the Nomination Committee has continued to work with Group Human Resources to review the Leadership Development Programme ('LDP') and to consider succession planning for senior management, taking into account the need for diversity of age, disability, education, gender, ethnicity and social background.

We have considered Board succession as part of our ongoing review of the structure of the Board and Committees. As Charles Watson will shortly have served nine years on the Board, he will retire from the Board later in the year at a date to be confirmed and we are considering the appointment of a new non-executive Director who can help us on our growth journey, especially on our expansion into Russia. This process is at an early stage and the recruitment will be carried out in line with our Board Diversity Policy.

In May 2019, following a rigorous review, with positive conclusions reached with regard to the contributions they bring to the Board, we renewed the appointments of Lynda Armstrong and Vladimir Kim, each for a further term of three years. Lynda Armstrong brings great insights on projects, health and safety and remuneration and Vladimir Kim brings expert knowledge of the economic and political landscape in Kazakhstan.

In February 2020, the Committee considered and discussed a paper setting out the regulations and guidelines regarding the retirement of Directors at the Annual General Meeting and having reviewed the performance of all Directors in conjunction with the results of the 2019 Board performance evaluation report, concluded that all members of the Board added value and devoted sufficient time to their duties. We were satisfied that the independent non-executive Directors serving at the end of the year continued to remain independent, so it was appropriate to recommend that all the Directors be proposed to retire and stand for re-election by shareholders at the Annual General Meeting of the Company to be held on 30 April 2020.

Michael Lynch-Bell
Chair, Nomination Committee

> The current structure of the Board has been in place for two years now and I consider it to be effective, with good governance

Composition

The current members of the Committee are:

Michael Lynch-Bell, Chair;
Lynda Armstrong; and
Alison Baker

Role and responsibilities

The Committee leads the process for appointments, ensures plans are in place for orderly succession to both Board and senior management positions and oversees the development of a diverse pipeline for succession.

Key roles and responsibilities of the Nomination Committee include:

- regularly reviewing the structure, size and composition (including the balance of skills, experience, independence, knowledge and general diversity) of the Board and making recommendations to the Board with regard to any changes;
- overseeing succession planning for Directors and senior management with appointments and succession plans based on merit and objective criteria as well as the skills and expertise that will be needed in these roles in the future whilst promoting diversity;
- selecting and appointing external search consultants to identify potential candidates for the Board and senior management positions when required;

- responsibility for identifying and nominating, for the approval of the Board, candidates to fill Board vacancies as and when they arise, in light of the role and capabilities required for a particular appointment;
- keeping under review Directors' existing and any new conflicts of interest and making recommendations as to whether a conflict should be authorised;
- reviewing the results of the Board performance evaluation process in relation to the composition of the Board and reviewing annually the time commitment required from the non-executive Directors to fulfil their duties;
- reviewing annually the Committee's own performance, constitution and terms of reference;
- recommending to the Board suitable candidates for the membership of Board Committees;
- recommending the re-appointment of non-executive Directors as appropriate at the conclusion of their specified term of office; and
- recommending the re-election by shareholders of Directors in accordance with the provisions of the Code.

The Committee's terms of reference are available to view on the Company's website (www.kazminerals.com).

Governance

The Committee is chaired by the Deputy Chair and all members of the Committee are independent non-executive Directors in accordance with the provisions of the Code that a majority of members should be independent. If a matter concerns the Deputy Chair personally, then he leaves the meeting and Lynda Armstrong takes the chair.

Succession Planning and Diversity

The Group has in place the LDP under which key positions are determined and potential successors for these roles are identified. The potential successors are given individual development plans, mentoring and training. The progress of their development is monitored regularly by the Group Director of Human Resources, quarterly by other senior management and half yearly by the Chief Executive Officer. The Group Director of Human Resources reports regularly into the Nomination Committee on succession planning and the LDP. The Board recognises the need to create conditions which foster talent and we encourage all employees to achieve their full career potential at the Group. As part of the Group's approach to human resource management, it encourages employee diversity and aims to ensure that KAZ Minerals' future senior leadership team reflects the demographics and ethnic diversity of the countries in which it operates and the general employee base. For further information on the Group's approach to diversity please see pages 60 of the Sustainability report and page 85 of the Governance framework.

The Board is comprised of men and women with a wide range of skills and business experience drawn from a number of industries, which enables different perspectives to be brought to Board discussions. Furthermore, the Board is made up of a variety of nationalities, which brings cultural and ethnic diversity as well as different geographical experiences and viewpoints. The combination of these factors enables the Board to benefit from a variety of skills, perspectives and thoughts, which provides a dynamic environment for decision making. When recruiting, the Board seeks to maintain or improve its diversity and under our Board Diversity Policy we set out our aspiration to reach a composition of 33% women on the Board by the end of 2020. The policy can be viewed on our website at www.kazminerals.com.

Activities in 2019

At its meetings in 2019, the Committee, amongst other matters and in addition to those already stated in this Nomination Committee section:

- conducted a review of the Board skills matrix and concluded that it would be optimal to recruit an additional non-executive Director during 2020, in particular in view of the impending retirement of Charles Watson from the Board during 2020;
- in accordance with the Company's Articles of Association, assessed the performance of the Directors and recommended to the Board the re-election of all Directors by shareholders at the 2020 Annual General Meeting, having due regard to the performance and ability of each Director to continue to contribute to the Board and its Committees;
- reviewed the time commitment required by non-executive Directors to fulfil their duties; and
- reviewed its terms of reference and conducted a review of the results of the performance evaluation of the Committee.

Recruitment process

For the recruitment of new candidates to fill appointments to the Board, we generally use executive search consultants who specialise in the recruitment of high calibre executive and non-executive candidates and have no other connection with the Company. This ensures that we have access to a wide and high calibre pool of candidates from which to choose. A formal, rigorous and transparent search process is put in place in accordance with our Board Diversity Policy, with a candidate profile and position specification prepared, including time commitment expected and experience required. Interviews are then conducted by the Chair of the Nomination Committee, the other members of the Committee and the executive Directors. Other Directors are generally also invited to meet candidates during the interview process.

Attendance at Nomination Committee meetings

There were four meetings of the Nomination Committee during 2019, each member attending as shown below:

Members during 2019	Committee member since	Attendance at scheduled meetings during 2019
Michael Lynch-Bell	1 September 2013	4/4
Lynda Armstrong	7 May 2015	4/4
Alison Baker	1 January 2018	4/4

HEALTH, SAFETY AND SUSTAINABILITY COMMITTEE

> We were proud to launch the Group's Goal Zero safety initiative with a signing ceremony during one of our visits to Kazakhstan

Dear shareholder,

Our safety indicators this year have improved again but tragically we have had two fatalities in the East Region in 2019. All fatalities are preventable and following such incidents, thorough reviews are conducted both internally and by external authorities to identify the causes and to ensure that we put in place the right measures to prevent them recurring. A goal of zero fatalities remains our key priority and the Committee will continue to support and challenge management in the achievement of this target.

Over the course of the year, the Committee has continued to focus on minimising health and safety risks to our people, reviewed our environmental metrics and sustainable development and discussed ways in which we can responsibly manage our carbon footprint. The Committee approved the Group's sustainability strategy which brings together our wider business strategy and sustainability initiatives and forms a road map for us going forward.

We felt it appropriate to reflect our commitment to sustainability by reviewing the name of the Committee and accordingly the Board has agreed to our proposed change to the Committee's name; we are now the Health Safety and Sustainability ('HSS') Committee with effect from December 2019 and have updated our terms of reference as part of this change.

We were proud to launch the Group's Goal Zero safety initiative with a signing ceremony during one of our visits to Kazakhstan in June this year. The initiative is a commitment at all levels within the Group to achieve an incident and injury free workplace. The signing ceremony in June was a demonstration of the Board's commitment and the Committee has been pleased to see a range of tools including reporting, risk management and training being employed as part of this initiative for both Group employees and contractors.

Having visited several of the Group's tailings storage facilities, the Committee received updates from the Head of Dams and Tailings Storage Facilities on the governance of tailings facilities, recommendations from third-party inspections and reports on ongoing activities at the facilities. A presentation on the Yubileyno-Snegirikhinsky mine closure plan was given by management and it was pleasing to see the work that had been put into the decommissioning.

We received a further update on progress on the three year underground mine safety improvement project which we approved in 2017 and the Committee reviewed statistics from the Group's leading safety indicators and discussed the conclusions that could be drawn to ensure that they remained fit for purpose, contributing to the prevention of harm. We received the findings of internal reviews of HSS which were conducted during the year at a number of our sites, to assess compliance with the Group's HSS policies, make recommendations for further improvements and give focus to specific priorities of HSS. We considered the outcomes of these reviews and requested improvements to be made in various areas identified. We also reviewed the three year health and safety strategic plan, focused on strengthening the long-term foundations for safe, productive work.

A presentation was given to us on historical incidences of occupational diseases and we received reports on how management was sharing learnings with regional peers to prevent or reduce incidences of these health issues. We are also placing an increased focus on recognising and addressing mental health issues for site based workers and additional resource will be put into this area during the year.

The Committee continues to believe that its visits to the Group's operations provide an invaluable opportunity for Committee members to engage directly with the workforce, assess corporate culture, witness HSS initiatives in action and understand first hand the challenges and opportunities that exist. We made two trips to Kazakhstan during 2019, one in June and one in October, to visit three of our operations: Bozshakol, Aktogay (including the expansion project) and Irtyshsky, one of our established underground mines in the East Region, together with its associated tailings facility.

I will have completed nine years on the Board during 2020 so I will be stepping down as a Director later this year. This will be my final report as Chair of the Committee, a role I have been passionate about. I have enjoyed supporting the Company through a period of real cultural change as it seeks to embed long-term improvements in health, safety and sustainability within the organisation.

Charles Watson
Chair, Health, Safety and Sustainability Committee

Composition

The current members of the Committee are:

Charles Watson, Chair;
Lynda Armstrong;
Michael Lynch-Bell; and
John MacKenzie

Role and responsibilities

The Committee is primarily responsible for keeping under review the development and maintenance of a framework of policies and standards which are used to assess, manage and where possible prevent, health, safety and sustainability risks. Reports on the Committee's reviews are then provided to the Board.

Two of the three meetings of the Committee during the year were held in Kazakhstan and involved meeting with management responsible for health, safety and sustainability at the mine sites, with each visit lasting for two or three days.

Key responsibilities of the Committee include:

- assessing the impact of health, safety and sustainability issues on the Group's stakeholders and ensuring remedial action is taken in respect of any such issues where appropriate;
- reviewing compliance by the Group with relevant health, safety and sustainability legislation;
- monitoring and assessing the commitment and behaviour of management towards health, safety and sustainability related risks;
- reviewing significant safety incidents, considering the key causes thereof and ensuring actions are taken to prevent similar incidents occurring including reporting of these incidents and any 'near misses';
- facilitating the promotion by management of a culture of care and sensitivity towards the environment and the communities in which the Group operates;
- making proposals to the Remuneration Committee regarding appropriate health, safety and sustainability performance objectives for executive Directors and certain senior managers and providing its assessment as to performance against such objectives; and
- reviewing the findings of any internal or external reports on the Group's health, safety and sustainability systems.

The Committee's terms of reference are available to view on the Company's website (www.kazminerals.com).

Attendance at Health, Safety and Sustainability Committee meetings

There were three scheduled meetings of the Health, Safety and Sustainability Committee during 2019, with each member attending as shown below:

Members during 2019	Committee member since	Attendance at scheduled meetings during 2019
Charles Watson	16 November 2011	3/3
Lynda Armstrong	21 October 2013	3/3
John MacKenzie	1 March 2015	3/3
Michael Lynch-Bell	1 January 2018	3/3

Activities in 2019

At its meetings in 2019, the Committee, amongst other matters:

- visited the mine at Aktogay and the Aktogay expansion project, with particular focus on sites of HSS incidents, to better understand the reasons why they took place;
- at Bozshakol visited the mine, concentrator, tailings storage facilities, clay plant and clay dump and permanent camp;
- received presentations on the approach to health and safety from the Project Directors at each of the Aktogay and Artemyevsky expansion sites where substantial construction works are ongoing;
- evaluated the Committee's effectiveness for 2019, including identifying training needs and reviewed its terms of reference and future role and direction;
- reviewed reports received through the Speak Up system where HSS concerns were raised and made recommendations for improvements;
- received a status update on sustainability responsibility reporting, including key performance indicators; and
- reviewed and evaluated fatal and serious incident reports and visited locations of some of the serious incidents at the mines.

Plans for 2020

In 2020, the Committee will seek assurance that health, safety and sustainability systems, procedures and behaviours are well established throughout the Group. Global sustainability best practice will be reviewed and incorporated as appropriate. Over the course of the year we plan to visit several of our operations in Kazakhstan.

PROJECTS ASSURANCE COMMITTEE

Dear shareholder,

The Projects Assurance Committee has responsibility for providing assurance to the Board on matters relating to the Aktogay expansion project and the Baimskaya copper project. It re-formed in October 2018.

The Committee is advised by two external consultants with many years of project experience in the extractives industry. These external advisors review reports from management, visit sites, attend some meetings with management and the EPC contractors and attend each Committee meeting to provide independent assessments of progress at the two major projects. My fellow Committee members are Lynda Armstrong, who has over 30 years' experience in the extractives industry, and Charles Watson, who has extensive experience in both operational management and major project delivery. Meetings are regularly attended by the Chair of the Board and the Chief Executive Officer and the Board receives an update following every meeting.

Over the course of the year, the Committee received reports and presentations from members of management responsible for various areas of the projects, to monitor progress against planned cost and schedule, review studies, consider requests for capital expenditure for recommendation to the Board, and to provide advice on areas where improvements could be made.

John MacKenzie
Chair, Projects Assurance Committee

Composition

The current members of the Committee are:

John MacKenzie, Chair;
Lynda Armstrong; and
Charles Watson

Role and responsibilities

Key responsibilities of the Committee include:

- undertaking regular reviews of the Group's major growth projects, these currently being the Aktogay expansion and Baimskaya copper projects, against approved plans to determine any material variances to the plans and forecasts and to identify any material risks and issues that may impact the successful delivery of the projects;
- reviewing the process, quality and outcomes of the studies relating to the Baimskaya copper project;
- reviewing any findings and recommendations arising from the assessments and monitoring progress in implementing any such recommendations;
- monitoring the composition and performance of the projects owners' teams, including regularly reviewing the processes, systems, staffing and organisation of the projects, and benchmarking against international best practice; and
- continuing to monitor the ongoing implementation of systems and processes at Bozshakol and Aktogay and ensuring that these are in line with good industry practice.

> "The Projects Assurance Committee has responsibility for providing assurance to the Board on matters relating to the projects"

In addition to the four scheduled meetings of the Committee during the year, one further meeting was held which focused on the Baimskaya copper project only.

Plans for 2020

The Committee is scheduled to meet four times during 2020 and will continue to review regularly the Group's progress on the current major growth projects.

Attendance at Projects Assurance Committee meetings

There were four scheduled meetings of the Committee during 2019, with each member attending as shown below:

Members during 2019	Committee member since	Attendance at scheduled meetings during 2019
Lynda Armstrong	18 October 2018	4/4
John MacKenzie	18 October 2018	4/4
Charles Watson	18 October 2018	4/4

REMUNERATION *REPORT*

> The remuneration structure aligns the interests of executive Directors and senior management, with shareholder and employee interests

Dear shareholder,
On behalf of the Board, I am delighted to present the Directors' Remuneration report for 2019.

Performance highlights in 2019

During 2019, the Group continued to build on its operational track record, growing its copper and gold production, whilst maintaining its industry leading cost position.

In the near term, the Group has production growth from the Aktogay expansion which commissions in 2021 and longer term growth from the Baimskaya copper project in Russia. The acquisition of the Baimskaya copper project is aligned with our low cost, high growth copper strategy; this asset has the potential to double the Group's copper production and triple its gold output when it commences the processing of ore from 2026. The project is currently at feasibility study stage, the results of which we look forward to bringing you later in the first half of 2020.

Our position as a highly profitable low cost producer was maintained in 2019, with EBITDA of $1,355 million at a margin of 60% and a net cash cost of 77 USc/lb. This continues to demonstrate the successful delivery of the strategy we embarked on ten years ago in 2010, to focus our production on large scale, low cost open pit mines.

This report includes the Annual report on remuneration (pages 107 to 115) which describes how our remuneration policy (which was approved at the 2017 Annual General Meeting) was implemented over the course of the year ended 31 December 2019. As part of the three-year renewal cycle set out in the reporting regulations, the Company is required to seek shareholder approval for a new remuneration policy at the 2020 Annual General Meeting and this new policy can be found in full on pages 100 to 106.

The Company's remuneration structure for senior executives remains straightforward and is closely linked to performance. The package comprises three elements:

- Fixed pay – salary and benefits;
- Annual bonus; and
- Long-term performance-based share awards.

Our current remuneration policy presented at the 2017 Annual General Meeting was supported by over 99% of shareholders and we believe that this policy continues to support our stakeholder interests and therefore no major changes are proposed. We have reviewed the policy to align it further with best practice and the key changes which are proposed to be made include:

- formal reduction of retirement benefits – while pension benefits under the current policy are capped at 20% of salary, in practice at all times, lower benefits have been provided to executives (Chair: 0% of salary, Chief Executive Officer: 10% of salary). Under the new remuneration policy, pension benefits will be capped at the rate offered to other employees, which is currently 10% of salary in the UK.
- post-cessation shareholding – executive Directors will be expected to maintain a holding of 200% of salary (or their actual shareholding, if lower), for two years following departure.
- malus and clawback provisions – the recovery provisions (malus and clawback) for both the bonus and LTIP will be formally extended to include, as trigger events, serious reputational damage and serious corporate failure. These provisions formalise the changes made in last year's Directors' Remuneration report.

Remuneration in 2020

By focusing on the delivery of the Group's purpose and strategic objectives, in the context of appropriate risk and safety management, the remuneration structure aligns the interests of executive Directors and senior management, with shareholder and employee interests, to support the Group's strategic goals and to promote the long-term sustainable success of the Company. Accordingly, one of the changes we have introduced is to have a longer measurement period over part of the LTIP awards this year; part of the 2020 LTIP awards will be based on five year Total Shareholder Return ('TSR') performance. For more information please see the Annual report on remuneration on page 107.

The key points to note in respect of executive Director remuneration in 2020 are as follows:

- Oleg Novachuk's salary remains unchanged;
- Andrew Southam's salary was increased by 2% in line with the UK workforce;
- Andrew Southam's pension arrangement will remain at 10% of salary in line with other UK employees, whilst Oleg Novachuk will continue not to receive any pension benefits;
- The maximum bonus opportunity for both executive Directors will be the same as for 2019, at 150% of salary, with 70% of the award based on operational and financial targets and 30% based on strategic development goals; and
- LTIP awards will be mostly unchanged from last year other than the extended measurement period mentioned above and as explained more fully in the Annual report on remuneration, still with a primary focus on relative TSR. Awards to Andrew Southam will again have 25% based on a balanced scorecard of key strategic priorities linked to safety, strategic management of the Group's asset portfolio and culture.

Shareholder engagement

The Committee communicates openly and transparently with shareholders on executive remuneration and we have consulted with our largest institutional investors on the new remuneration policy which we plan to present to shareholders at the 2020 Annual General Meeting. Throughout the year we have maintained a dialogue with proxy voting bodies and major institutional investors to ensure they understand the basis of key decisions.

At the 2019 Annual General Meeting, the clear majority of our shareholders were supportive of the Company's approach to remuneration. We seek to link pay and performance, and we remain committed to ensuring executives are incentivised for the creation of long-term value for our shareholders. Remuneration levels for Oleg Novachuk and Andrew Southam continue to reflect their executive roles and the value they bring to the Group's business.

The Annual report on remuneration and this annual statement will be subject to an advisory vote at the forthcoming Annual General Meeting, while the updated remuneration policy will be subject to a binding vote. The current remuneration structure continues to be appropriate and there is considerable merit to maintaining this framework, therefore I am pleased to recommend these proposals to shareholders. The members of the Committee welcome any questions on remuneration matters at the 2020 Annual General Meeting and we are available at any other time to discuss feedback on the new policy and its implementation as well as our general approach to remuneration.

Lynda Armstrong OBE
Chair, Remuneration Committee

Summary of Executive Director remuneration structure

Fixed remuneration

Base Salary	Pension	Benefits

Variable remuneration

Short term – annual	Long term – five years
Annual bonus plan – linked to Group performance	LTIP linked to longer-term shareholder priorities with combined five year vesting and holding period

Total remuneration

REMUNERATION POLICY

This part of the Directors' Remuneration report sets out the new Directors' remuneration policy for the Group (the 'Policy'), which will be subject to a binding vote at the Annual General Meeting on 30 April 2020 and if approved will take effect from the close of that meeting.

The Remuneration Committee is of the view that the policy approved by shareholders at the Annual General Meeting in 2017, continues to support the strategic ambitions of the Group and remains aligned with shareholders' interests. Consequently, only minor changes have been proposed in the Policy to reflect evolving market and best practice. The Policy has been determined after reviewing the impact of the previous policy and having consulted with shareholders. Measures to avoid or manage conflicts of interest are discussed within our Governance framework on page 84.

The key changes which have been made include:

- formal reduction of retirement benefits – while pension benefits under the current policy are capped at 20% of salary, in practice at all times, lower benefits have been provided to executives (Chair: 0% of salary, Chief Executive Officer: 10% of salary). Under the Policy, pension benefits will be capped at the rate offered to other relevant employees. The measure currently believed to be appropriate is the rate offered to other UK employees, which is currently 10% of salary.
- post-cessation shareholding – we will introduce a new guideline for executive Directors to maintain a holding of 200% of salary (or their actual shareholding, if lower), for two years following departure.
- malus and clawback provisions – the recovery provisions (malus and clawback) for both the bonus and LTIP will be formally extended to include, as trigger events, serious reputational damage and serious corporate failure. These changes formalise the changes made in last year's Directors' Remuneration report.

In addition to the above, other minor changes have been made to the terms to align with evolving market and best practice.

Remuneration principles

The Group's success depends on the performance and commitment of its employees, who are key stakeholders of the business. KAZ Minerals' approach towards executive performance, reward and benefits, supports and drives its strategy and is aligned with its purpose and reinforces its values in the context of appropriate risk management. The Committee seeks to ensure that the Company's remuneration policies and practices:

- facilitate the recruitment, retention and motivation of high calibre executives with the appropriate skills to implement the Group's strategy and business objectives;
- provide a strong and demonstrable link between incentives and the Group's strategy and purpose;
- set a performance-biased framework for remuneration which is consistent with the Group's circumstances and which promotes long-term shareholdings by executive Directors and certain senior managers, enabling them to share in the long-term success of the Group without delivering excessive benefits or encouraging short-term measures or excessive risk taking; and
- are aligned to shareholder interests.

The strategy for executive Director remuneration is to provide a balanced package, with a high proportion of total remuneration being awarded through performance-related elements to ensure a clear link between pay and performance.

Remuneration policy table

The following table sets out the Policy for executive Directors:

Remuneration report	
Salary	
Purpose and link to strategy	To attract and maintain high calibre executives taking account of market levels at the date of appointment and on subsequent review.
Operation	Typically reviewed annually, with increases usually effective from 1 January. Any increases take account of, but are not limited to: • Company and individual performance • Skill set and experience of the executive • External indicators such as inflation and market conditions • Remuneration of Group employees, particularly in the UK. Where no pension provision is provided an adjustment may be made to salary.
Maximum	The current salaries for executive Directors are set out on page 109 of the Annual Report on Remuneration. Salary reviews take account of Company and individual performance. There is no prescribed maximum annual increase, however the Committee is guided by the general increase for the broader employee population, particularly in the UK. On occasion there may be a need for any increase to recognise, for example, development in role, change in responsibility and/or specific retention issues as well as the market context. The Committee has the flexibility to set the salary of a new hire at a discount to the market level initially, with a series of planned increases implemented over the following few years to bring the salary to the desired positioning, subject to individual performance.
Benefits (including retirement benefits)	
Purpose and link to strategy	Provide market competitive benefits to help recruit and retain high calibre executives. Retirement benefits provide a competitive means of saving to deliver appropriate income in retirement.
Operation	Provision of benefits such as: • Private medical insurance • Relocation assistance • Travel and related expenses • Life insurance Additional benefits may be provided from time to time. The Committee will consider whether the payment of any additional benefits is appropriate and in line with market practice when determining whether and at what level they are paid. Executive Directors are also entitled to participate in any 'all-employee' share plans or benefit arrangements on the same basis as other employees. Executive Directors may be provided with retirement benefits (either via participation in a pension plan, cash in lieu, or economic equivalent).
Maximum	The cost of benefits is not pre-determined given that the costs of a benefit may change based on the individual's circumstances, therefore no overall monetary maximum has been set. The Committee will consider whether the payment of any additional benefits is appropriate and/or in line with market practice when determining whether and at what level they are paid. For UK tax-advantaged share plans, the maximum participation level (for UK-based employees) is as set out by the relevant HMRC limits. Executive Directors may be provided with retirement benefits (either via participation in a pension plan, cash in lieu, or economic equivalent) capped at the rate applicable to the majority of employees in the relevant jurisdiction. For UK employees this is currently equivalent to 10% of salary.

Annual Bonus Plan

Purpose and link to strategy	Incentivise the delivery of annual objectives consistent with the Group's strategy, without encouraging short-term measures or excessive risk-taking.
Operation	Not pensionable. Payments determined on the basis of: • Operational performance • Financial performance • Strategic developments The Committee will determine the appropriate weightings of the performance metrics on an annual basis with targets set by reference to the financial and operating plans. Payments scaled back in the absence of an improvement in the Group's safety performance. Bonus starts to earn at threshold level (where 0% of salary is normally payable). For performance between the threshold and maximum hurdles, award levels are appropriately scaled. The Committee may adjust the formulaic outcome where it is believed the outcome does not reflect the Committee's assessment of the underlying performance of the Company, or is not appropriate in the context of circumstances that were unexpected or unforeseen at the start of the bonus year. In order to facilitate share ownership, the Committee may determine that a portion of any bonus received will be deferred into shares for two years (or such other period as the Committee may determine). The Committee retains discretion to determine the level of bonus deferral required, mindful of an executive Director's shareholding. Dividends (or equivalents) may accrue in respect of any deferred shares. Malus and clawback applies under circumstances as set out on page 105.
Maximum	Maximum bonus potential of 200% of salary for the achievement of stretching performance objectives with a target bonus of 100% of salary. For 2020, the maximum bonus potential for the Chair and Chief Executive Officer will be up to 150% of salary, with a target bonus of up to 75% of salary.

Long Term Incentive Plan ("LTIP")

Purpose and link to strategy	Incentivise long-term value creation and deliver against the Group's strategy over the longer term by way of long-term performance targets and share-based remuneration.
Operation	Normally granted annually, awards under the LTIP are rights to receive nil-cost shares (or economic equivalent), subject to continued employment and performance metrics set by the Remuneration Committee at the time of grant, measured over a period of at least three years. The Committee will regularly review the performance metrics and targets to ensure they support long-term thinking, deliver against the Group's strategy and remain challenging and reflective of commercial expectations. At least 50% of any award will be based on performance metrics linked to targets based on shareholder returns. Details of targets for 2020 awards are set out in the Annual report on remuneration. Up to 25% vests at threshold for each respective element, rising to 100% at stretch performance. There will usually be scaled vesting between threshold and stretch performance. Shares arising from an LTIP award must normally be held for a total period of five years prior to release. Where awards are subject to a three year performance period, an additional two year holding period will normally apply. The Committee has discretion to vary the formulaic vesting outcome applying to any LTIP award where it believes the outcome does not reflect the Committee's assessment of the underlying performance of the Company or is not appropriate in the context of circumstances that were unexpected or unforeseen at the date of grant. Dividends (or equivalents) may accrue in respect of any deferred shares. Malus and clawback applies under circumstances as set out on page 105.
Maximum	Maximum of 200% of salary in respect of any financial year. For 2020 the award policy would be as follows: • Chair – 150% of salary • Chief Executive Officer – 200% of salary Within the remit of the Policy, the Committee will review both grant levels and performance criteria prior to granting LTIP awards in future years.

Detailed provisions and plan flexibility

The Committee will operate the annual bonus plan and LTIP according to the rules of each respective plan. Consistent with normal market practice and the Listing Rules, the plans include flexibility in a number of regards, such as the ability within the Policy to adjust targets and/or set different measures, and to alter weightings for the annual bonus plan. Awards made under any of the Company's share plans may:

- have any performance conditions applicable to them amended or substituted by the Committee if an event occurs which causes the Committee to determine an amended or substituted performance condition would be more appropriate;
- incorporate the right to receive an amount (in cash or additional shares) equal to the value of dividends which would have been paid on the shares under an award that vests. This amount may be calculated assuming that the dividends have been reinvested in the Company's shares on a cumulative basis;
- be settled (in whole or part) in cash at the Committee's discretion, although the Committee would only do so where the particular circumstances made it appropriate to do so – for example, where there is a regulatory restriction on the delivery of shares; and
- be adjusted in the event of any variation of the Company's share capital or any demerger, delisting, special dividend or other event that may affect the Company's share price in accordance with the rule of those plans.

The Committee will normally consult with shareholders in the event of material application of discretion. The Committee reserves the right to make any remuneration payments and/or payments for loss of office (including exercising any discretions available to it in connection with such payments) notwithstanding that they are not in line with the Policy where the terms of the payment were agreed either:

(i) before the 2014 Annual General Meeting (the date the Company's first shareholder-approved Directors' remuneration policy came into effect); (ii) before the Policy came into effect, provided that the terms of the payment were consistent with the shareholder-approved Directors' remuneration policy in force at the time they were agreed; or (iii) at a time when the relevant individual was not a Director of the Company (or other person to whom this Policy applies) and, in the opinion of the Committee, the payment was not in consideration for the individual becoming a Director of the Company (or such other person). The Committee may make minor amendments to the Policy to aid its operation or implementation without seeking shareholder approvals (e.g. for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation) provided that any such change is not to the material advantage of Directors.

Choice of performance measures and approach to target setting

In determining the levels of executive reward, the Committee continues to place considerable emphasis on ensuring a strong and demonstrable link between actual remuneration received and the achievement of KAZ Minerals' strategic and business objectives. The Committee sets stretching performance objectives for executive Directors and certain senior managers. To achieve these objectives and deliver performance requires outstanding business management and strategic execution.

The annual bonus plan performance targets are therefore based on a combination of financial, operational and strategic objectives, which provide clear alignment to the Group's KPIs and strategic priorities. As safety is a key priority of the Group, awards are also subject to a safety override ensuring that payouts will be scaled back in the absence of improvement in the Group's safety performance.

The LTIP provides a focus on delivering superior returns to shareholders by providing rewards for longer-term shareholder return outperformance. For 2020, the LTIP opportunity is primarily based on the Company's TSR against a comparator group of selected companies. For the Chief Executive Officer a strategic scorecard applies to increase alignment with the Group's shareholders and to ensure that his reward is clearly linked to delivery of key strategic priorities over the medium to long term. The Committee continues to believe that TSR remains an appropriate performance target as it endorses consistency in the Policy and provides a clear alignment of interests with shareholders. In addition, TSR ensures a degree of risk management as it, through the share price, reflects both underlying financial performance and the market's assessment of the quality and sustainability of the Company's earnings.

Shareholding guidelines

All executive Directors are expected to hold shares equivalent in value to a minimum of 200% of their base salary within a five year period from their date of appointment.

Executive Directors are normally required (where permitted from a technical perspective) to hold shares arising from an LTIP award for a period of five years from the date of grant, with only those shares required to cover a tax liability on exercise of an LTIP award, permitted to be sold.

Following employment, executive Directors are normally expected to retain a material interest in their first two years post-employment. This holding is normally expected to be equal to the in-post holding requirement (or the value of shares acquired from incentive plans, if lower).

Differences in remuneration policy for executive Directors compared with other employees

The Committee considers the pay structures across the wider Group workforce when setting the remuneration policy for executive Directors and in particular, basic pay increases would typically be limited to those which relevant employees have received. The key difference is that, overall, the remuneration policy for executive Directors is more heavily weighted towards variable pay than for other employees. In particular, long-term incentives are provided only to the most senior executives as they are reserved for those considered to have the greatest potential to influence overall levels of performance.

Incentive arrangements in the wider Group are tailored to reflect the nature of the role and the local talent market.

The most senior level of managers below Board level are eligible to receive a bonus. For some senior managers, a portion of the bonus is deferred and invested in the Company's shares and provided they remain in employment, the shares will be released after one, two or three years. Certain senior managers are also eligible to receive awards under the LTIP and the performance conditions for LTIP awards are normally the same as those which apply to executive Directors.

Illustration of the application of remuneration policy

A key element of the Policy is to provide a significant part of potential reward through performance-based incentive plans. Set out below is the reward mix for the executive Directors at minimum performance, on-target performance and maximum performance as proposed under the Policy table.

The basis of calculation and key assumptions used to complete the charts are as follows:

Minimum

Only fixed pay is payable, i.e. base salary, benefits and pension (where applicable).

Base salary levels (on which other elements of the remuneration package are calculated) are based on those applying for 2020.

Benefits are based on the estimated cash cost to the Company or the taxable value to the executive Director.

Pension, applicable for Andrew Southam only, is 10% of base salary.

On-target

Fixed pay (as above) plus 50% of the maximum annual bonus payout of 150% of salary plus an LTIP award with a face value of 150% of salary for Oleg Novachuk and 200% of salary for Andrew Southam (in line with the 2020 grant levels), vesting at 25% of maximum, being the threshold level of vesting.

Maximum

Fixed pay (as above) plus 100% of the maximum annual bonus payment of 150% of salary plus an LTIP award with a face value of 150% of salary for Oleg Novachuk and 200% of salary for Andrew Southam (in line with the 2020 grant levels), vesting at 100% of maximum.

Impact of share price increase

As LTIP awards are granted in shares, the value of the award can vary significantly depending on the extent to which the performance criteria are achieved and the movement of the share price over the relevant vesting and holding period. For example, if the share price increased by 50% over the relevant vesting and holding period, the maximum values shown in the charts below would increase to £4.1 million for Oleg Novachuk and £3.6 million for Andrew Southam. Similarly, if the share price was to fall by 50% the maximum values shown in the charts below would reduce to £2.8 million for Oleg Novachuk and £2.3 million for Andrew Southam.

Recruitment and appointment policy

Subject to the terms set out below, the remuneration package on appointment or promotion to a new executive Director role will be set on such terms as the Committee determines appropriate at the time.

The maximum level of variable pay for any new appointment (excluding any buy out) will be consistent with the level set out in the Policy table. Where appropriate the Committee may tailor the nature of awards on appointment (e.g. the form or performance conditions) based on the commercial circumstances and strategic priorities at the relevant time.

When appointing a new executive Director, the Committee may offer certain cash or share-based elements for the purpose of buying out his or her arrangements forfeited on joining the Company. These payments would not exceed what is felt to be a fair estimate of values forfeited and would reflect (as far as possible) the nature and time horizons attaching to that remuneration and the impact of any performance conditions.

In the case of an internal executive appointment, any variable pay element awarded in respect of the prior role will be allowed to pay out according to its existing terms, adjusted as relevant to take into account the appointment. In addition, any other ongoing remuneration obligations existing prior to appointment will continue.

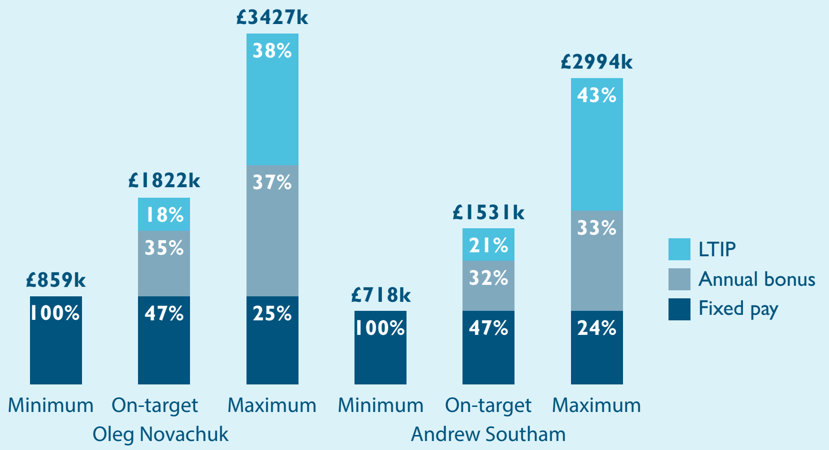
The Committee has the flexibility to set the salary of a new hire at a discount to the market level initially, with a series of planned increases implemented over the following few years to bring the salary to the desired positioning, subject to individual performance. For external and internal appointments, the Committee may agree that the Company will meet certain relocation expenses as appropriate. In addition, the Committee may agree to provide tax equalisation for any new appointment. For the appointment of a new non-executive Chair or Deputy Chair or other non-executive Director, the fee arrangement would be set in accordance with the approved remuneration policy in force at that time.

Service contracts and policy on payments for loss of office

Service contracts normally continue until the executive Director's agreed retirement date or such other date as the parties agree. The Company's policy is that executive Directors will be employed on a contract that can be terminated by the Company on giving no more than one year's notice, with the executive Director required to give up to six months' notice of termination. The Committee will, consistent with best practice and in the interests of the Company and its shareholders, seek to minimise termination payments.

A Director's service contract may be terminated without notice and without any further payment or compensation, except for sums earned up to the date of termination, on the occurrence of certain events, such as gross misconduct. The circumstances of the termination (including the individual's performance) are taken into account by the Committee when determining amounts payable as a result of termination. The Committee's normal policy on termination is to make phased compensatory payments and to stop or reduce such payments to former executive Directors where they receive remuneration from other employment during the notice period (where this is consistent with local employment legislation and market practice).

Illustration of the application of remuneration policy



Provision	Summary terms
Notice period	Up to 12 months
Termination payment	Base salary plus benefits. Payments will normally be paid monthly and be subject to mitigation (where this is consistent with local employment legislation and market practice).
Remuneration entitlements	A pro-rata bonus may also become payable for the period of active service along with, under the rules, vesting of outstanding share awards (in certain circumstances). In all cases performance targets will apply.

Any share-based entitlements granted under the Company's share plans will be determined on the basis of the relevant plan rules. The default treatment is that any unvested awards lapse on cessation of employment. However, in certain prescribed circumstances (death, ill-health, injury, redundancy, disability, retirement, or other circumstances at the discretion of the Committee taking into account the individual's performance and the reasons for their departure), 'good leaver' status will be applied.

The extent to which 'good leavers' unvested LTIP awards vest will be determined by the Committee, taking into account the extent to which any relevant performance conditions have been satisfied and unless the Committee determines otherwise, the proportion of the performance period that has elapsed. If a Director leaves during the holding period of an LTIP award, his award will be retained, unless he is summarily dismissed, where it will lapse. Awards will normally vest (and be released from their holding periods) as if the Director had not left although the Committee may allow awards to vest and be released early if it considers it appropriate (e.g. on death). Interest in deferred shares under the bonus to 'good leavers' will generally be retained.

The Company reserves the right on termination to make a payment in lieu of notice which may be through phased payments which are paid in monthly instalments and subject to mitigation through a legal obligation on the part of the departing executive Director to seek new employment.

The Committee reserves the right to make any other payments in connection with a Director's cessation of office or employment where the payments are made in good faith in discharge of an existing legal obligation (or by way of damages for breach of such an obligation) or by way of settlement of any claim arising in connection with the cessation of a Director's office or employment. Any such payments may include but are not limited to paying any fees for outplacement assistance and/or the Director's legal and/or professional advice fees in connection with his/her cessation of office or employment.

Takeovers

If there is a takeover or winding up of the Company, share-based awards will vest (and be released from any holding periods) early. The extent to which unvested LTIP awards vest, will be determined by the Committee, taking into account the extent to which any relevant performance conditions have been satisfied, any other performance factors the Committee considers relevant, and unless the Committee determines otherwise, the proportion of the performance period that has lapsed. If there is a demerger, special dividend, delisting or any other event that would in the Committee's opinion materially affect the Company's share price, awards may vest (and be released) on the same basis as for a takeover.

Malus and clawback

Malus and clawback provisions operate in respect of the annual bonus, deferred bonus shares and LTIP awards. These enable the Company to reduce the size of unvested awards and to claw back the relevant value of the vested or released shares.

For awards granted on or after 1 January 2020, malus or clawback may be applied in the circumstances where there is/are:

- a material misstatement of the financial results of the Group;
- an error in the assessment of any performance condition applicable to an LTIP award or in the information or assumptions on which the award was granted, vests or was released;
- endemic problems in financial or operating reporting or a material regulatory breach by any member of the Group or business unit;
- misconduct on the part of the participant, justifying his summary dismissal;
- serious reputational damage; and/or
- corporate failure.

Policy on external appointments

The Committee believes that the Company can benefit from executive Directors holding one approved non-executive directorship of another company, offering executive Directors the opportunity to broaden their experience and knowledge. Company policy is to allow executive Directors to retain fees paid from any such appointment. No executive Director currently holds a non-executive directorship of another company.

Deputy Chair or any non-executive Chair and other non-executive Directors

The Deputy Chair or any non-executive Chair and other non-executive Directors do not have service contracts but each has a letter of appointment with the Company. Each letter of appointment provides for a one month notice period other than for the Deputy Chair (or any non-executive Chair), who has a three month notice period. Vladimir Kim, in addition to his letter of appointment with the Company, has an employment agreement with KAZ Minerals Management LLP dated 1 January 2015 which, like his letter of appointment, provides for a one month notice period. Non-executive Directors are normally appointed for two consecutive three year terms, with any additional term being subject to rigorous review and taking into account the need to progressively refresh the Board.

The fee for the Deputy Chair or any non-executive Chair, is determined by the Committee (with the Deputy Chair or any non-executive Chair abstaining from any discussion or decision on his own fee), and reflects the commitment, demands and responsibility of the role. The fee is paid monthly in cash inclusive of all Committee roles and is not performance-related or pensionable.

Fees for the non-executive Directors are determined by the Board as a whole, upon the recommendation of the executive Directors. The policy on non-executive Directors' fees is set out in the table below:

Non-executive Directors' fees

Purpose and link to strategy	To be sufficient to attract, motivate and retain world class talent necessary to contribute to a high-performing Board and set at a level which reflects market conditions.
Operation and maximum	Fees are determined by the Board upon the recommendation of the executive Directors within the limits set out in the Company's Articles of Association, with non-executive Directors abstaining from any discussion or decision on their fees. The fee for the Deputy Chair or any non-executive Chair, is determined by the Committee (with the Deputy Chair or any non-executive Chair abstaining from any discussion or decision on his own fee). The Board takes account of recognised best practice standards for such positions when determining the fee level and structure. Fees are normally paid monthly in cash. Non-executive Directors do not participate in any of the Company's incentive arrangements or receive any pension provision. The non-executive Directors receive a base fee, with additional fees payable for additional Board responsibilities such as chairing and being a member of the Company's key Committees, or for the role of Senior Independent Director. The fee levels are reviewed on a periodic basis, with reference to the time commitment and responsibilities of the role and market levels in companies of comparable size and complexity. Limited benefits such as travel, accommodation and meals for non-executive Directors and their spouses and any associated tax may also be payable in certain circumstances.
Fee levels	Fee levels were reduced in 2013 and remain mostly unchanged from the reduced levels set. Fees (per annum) from 1 January 2020 are: Non-executive Deputy Chair and Senior Independent Director: £225,000 Non-executive Director base fee: £84,000 In addition to his fee of £84,000 as a non-executive Director, Vladimir Kim receives an advisory fee of £370,000 for assisting and supporting the Company in its dealings with the Government and regional authorities in Kazakhstan. Chairs of the Audit and HSS Committees: £15,000 Chair of the Projects Assurance Committee: £12,000 Chair of the Remuneration Committee: £12,000 Member of the HSS Committee: £9,000 Member of the Audit Committee: £7,500 Member of the Projects Assurance Committee: £6,000 Member of the Remuneration Committee: £4,000 The above fee levels may be varied (either up or down) during the three year period that the Policy operates to ensure they continue to appropriately recognise the time commitment of the role, increases or decreases to fee levels for non-executive Directors in general and fee levels in companies of a similar size and complexity provided that the fees payable to non-executive Directors do not exceed the limit in the Articles of Association of the Company.

Employee views

The Company does not formally consult with employees on executive remuneration, however there are many conduits for such engagement including the Direct Line with the Chair, engagement with unions and meetings with the Designated non-executive Director for the workforce. In addition, the Group Director of Human Resources reports to the Committee regularly to inform and update Committee members on workforce pay and policies. No remuneration comparison measurements were used to compare overall pay levels with those of the Directors given the differences in pay practices in the UK, Kazakhstan and Russia. However, when setting the remuneration policy for executive Directors, the Committee takes into account the overall approach to reward for, and the pay and employment conditions of other employees in the Group, particularly those in the UK.

Shareholder engagement

The Remuneration Committee actively seeks to engage with shareholders and values highly the contribution their views can make in the process of formulating remuneration policy decisions.

The Committee considers feedback received from shareholders prior to and following each Annual General Meeting. It also actively monitors guidance and directional themes emerging from institutional shareholder bodies on the subject of executive remuneration. This feedback, plus any emerging relevant guidance, is considered as part of the Company's annual review of remuneration policy.

Details of votes cast for and against the resolution to approve last year's remuneration report are provided in the Annual report on remuneration.

ANNUAL REPORT ON REMUNERATION

This report has been prepared in accordance with the Companies Act 2006 and Schedule 8 to the Large and Medium-sized Companies and Groups (Accounts and Reports) Regulations 2008 (as amended in 2013). It also meets the relevant requirements of the Financial Conduct Authority's Listing Rules and describes how the Board has applied the principles of good governance as set out in the Code.

Implementation of the policy for 2020

The following section sets out how we intend to apply our new 2020 remuneration policy (the 'Policy') this year. The structure remains broadly unchanged from the approach adopted in prior years.

Salary, pension and benefits

For 2020, Oleg Novachuk's annual base salary as full time Chair will remain unchanged at £856,000; his salary has remained the same since 2012. The Committee is satisfied that this salary level continues to reflect the scope and breadth of his full-time role as well as his highly marketable experience, industry knowledge and business relationships.

The Company does not provide any pension benefits to Oleg Novachuk.

Andrew Southam will receive an increase of 2% in 2020, in line with the UK workforce resulting in a salary of £650,250.

Andrew Southam is entitled to receive Company pension contributions and/or a cash allowance, with a total value of up to 10% of base salary, which is in line with the broader UK workforce.

Benefits include health insurance and where appropriate, relocation assistance, in line with entitlements provided for executives in similar positions in comparable companies.

Annual bonus

The maximum annual bonus opportunity for 2020 remains unchanged at 150% of salary for both Oleg Novachuk and Andrew Southam. The target bonus is generally set at 50% of maximum (75% of salary) for both Directors.

For 2020, the annual bonus plan structure is unchanged. A summary is provided in the table below:

Measure	Weighting
EBITDA	25%
Free Cash Flow	5%
Copper production	20%
Gross cash cost of copper	20%
Strategic objectives	30%
Total	100%

For each element, 0% is payable at threshold rising to 50% payable at target and 100% payable at stretch. The bonus may be scaled back in the event that the Committee considers that there has been insufficient improvement in safety over the prior year.

Specific targets will not be disclosed in advance, as they would give a clear indication of the Group's business objectives, which are commercially sensitive. However, retrospective disclosure of performance against specific targets will be made when they cease to be commercially sensitive.

Andrew Southam is required to defer one third of any bonus earned into the Company's shares for a period of two years. Given Oleg Novachuk's current substantial shareholding in the Company, the Committee does not consider it necessary to impose this requirement on him at this time.

Long-term incentives

LTIP grant levels for 2020 will remain unchanged, consistent with award levels granted in 2018 and 2019. For 2020, Oleg Novachuk will be granted an award of 150% of salary (based on relative TSR only) and Andrew Southam will be granted an award of 200% of salary (150% of salary based on relative TSR and 50% of salary based on a strategic scorecard).

The Committee currently expects 2020 to be the final year in which part of Andrew Southam's LTIP award will include an element linked to a strategic scorecard in respect of his appointment as Chief Executive Officer. This element was introduced following this role change in 2018, to increase his alignment with shareholders and link his reward to the delivery of key strategic priorities over the medium to long term. Within the remit of the policy, the Committee will review both grant levels and performance criteria prior to granting LTIP awards in 2021 and will consult with shareholders regarding any material changes in approach.

TSR performance is measured against a comparator group of UK and international mining companies. For LTIP awards to be granted in 2020, the performance period will be extended, so that half of the award will be measured over a three year performance period, and the remaining half measured over a five year performance period. Both performance periods will commence on 1 January 2020. This extended measurement period is intended to increase the focus on sustainable returns and better reflect the longer-term nature of operations in the sector. For awards granted in prior years, TSR was measured over two overlapping three year performance periods.

The vesting schedule and comparator group for the TSR element is set out below.

TSR ranking of KAZ Minerals	Vesting percentage
Upper quartile ranking	100%
Between median and upper-quartile	Straight-line vesting for performance between 25% and 100%
Median ranking	25%
Below median ranking	0%

2020 LTIP award – comparator group for relative TSR

Anglo American plc	Antofagasta plc
BHP Billiton plc	Boliden AB
Evraz plc	First Quantum Minerals Ltd
Freeport-McMoran Copper & Gold Inc	Fresnillo plc
Glencore plc	KGHM Polska Miedz S.A.
Lundin Mining Corporation	MMG Limited
Nornickel Group	Oz Minerals Limited
Polymetal International plc	Rio Tinto plc
Southern Copper Corporation	South 32 Limited
Teck Resources Ltd	

For Andrew Southam, part of his 2020 award (50% of salary) will again be linked to performance against a strategic scorecard as explained above. The scorecard is linked to safety, creating shareholder value for the long term and culture objectives. The main areas for assessment are summarised in the table that follows. The scorecard includes a number of granular objectives which are closely aligned with Group strategy and are therefore commercially sensitive. The Committee intends to provide further detail on these objectives and on its assessment of them following the end of the performance period, once the detail ceases to be commercially sensitive.

Safety	Objectives have been set with the aim of establishing significantly improved safety practices across the business including the goal of zero fatalities. This is an area which remains imperative for the business and where the Board has targeted a step-change in performance over the next three to five years.
Creating shareholder value for the long-term	Following the completion of the expansion projects at the Bozshakol and Aktogay sites, the Board has set asset portfolio management objectives focused on maximising value for shareholders during the next phase of the Group's development.
Culture and people	The Chief Executive Officer has been tasked with a number of initiatives which are intended to change the culture of the organisation, to better position the Group for future success. This includes measures on development of people, succession planning and due regard to social and environmental matters.

Vesting under this element will also be subject to an operating performance underpin. This safeguard mechanism will enable the Committee to review the underlying financial and operating performance of the Group, to ensure that vesting outcomes are justified. The Committee will retain scope to reduce vesting (including to nil) where appropriate.

LTIP awards for both executive Directors will normally be released after five years. Where performance is assessed over a three year performance period, an additional two year holding period will be applied. LTIP awards are also subject to malus and clawback provisions.

When determining LTIP award levels, the Committee remains mindful of the impact of share price volatility on the number of shares under award. This volatility is an inherent feature of the sector. Taking into account the share prices used to grant LTIP awards over multiple years, the Committee has determined that the proposed award levels for 2020 remain appropriate and ensure that participants are fully motivated towards the long-term performance of the Company.

Shareholding guidelines

Executive Directors are expected to build and maintain an interest in Company shares equivalent to 200% of their base salary.

During the year the Committee also agreed that executive Directors will be expected to retain a holding equal to this guideline (or the value of shares acquired from incentive plans if lower) for two years after they step down from the Board. This guideline will apply to share interests acquired from Company incentive plans.

Service contracts

Oleg Novachuk has a service contract dated 12 April 2017 with KAZ Minerals PLC and an employment agreement dated 12 April 2017 with KAZ Minerals Holding BV which are terminable by the Company or by the executive Director on three months' notice. Andrew Southam has a service contract with KAZ Minerals PLC dated 18 May 2013, which is terminable by the Company on 12 months' notice or by the executive Director on six months' notice.

Non-executive Directors' remuneration

The fee structure per annum from 1 January 2020 is as follows:

Non-executive Deputy Chair and Senior Independent Director:	£225,000
Non-executive Director base fee:	£84,000
Chairs of the Audit and HSS Committees:	£15,000
Chair of the Projects Assurance Committee:	£12,000
Chair of the Remuneration Committee:	£12,000
Member of the HSS Committee:	£9,000
Member of the Audit Committee:	£7,500
Member of the Projects Assurance Committee:	£6,000
Member of the Remuneration Committee:	£4,000

As disclosed in prior years, in addition to the fee of £84,000 Vladimir Kim receives as a non-executive Director, he receives an advisory fee of £370,000 per annum, under his employment contract with KAZ Minerals Management LLP, primarily for assisting and supporting the Company in its dealings with the Government and regional authorities in Kazakhstan. He also supports certain business development activities. This arrangement was agreed in 2014 and has remained unchanged since this time. Vladimir Kim has considerable experience in executing large mining projects in the region and his exemplary understanding of the political and regulatory environment in Kazakhstan, means that he continues to provide valuable support to the Company. The Board believes that the fee provided to Vladimir Kim continues to be commensurate with both his time commitment and the value he provides to the Company.

For each non-executive Director who served during 2019, the date of their current letter of appointment is shown in the table below. Each letter of appointment provides for a one month notice period other than for the Deputy Chair, who has a three month notice period. Non-executive Directors stand for re-election at each Annual General Meeting.

Name	Letter of appointment
Lynda Armstrong	27 June 2019
Vladimir Kim	27 June 2019
Michael Lynch-Bell	21 December 2017
John MacKenzie	7 March 2018
Charles Watson	30 October 2018
Alison Baker	8 September 2017

Directors' remuneration for 2019

The Group's external auditors, KPMG LLP, have audited the information contained in the tables headed Executive Directors' remuneration, Executive Directors' interests in the Long Term Incentive Plan – Awards granted during 2019 and All outstanding awards, non-executive Directors' fees and expenses and Directors' interests in ordinary shares.

Executive Directors' remuneration

	Oleg Novachuk		Andrew Southam	
£'000	2019	2018	2019	2018
Salary	856	856	638	625
Benefits[1]	3	3	3	2
Pension or cash in lieu	–	–	56	56
Sub-total – fixed remuneration	**859**	**859**	**697**	**683**
Annual performance bonus[2]	903	860	672	628
Long Term Incentive Plan[3]	2,636	4,609	1,207	1,840
Sub-total – variable remuneration	**3,539**	**5,469**	**1,879**	**2,468**
Other[4]	–	–	–	1
Total	**4,398**	**6,328**	**2,576**	**3,151**

1 Benefits for Oleg Novachuk and Andrew Southam relate to the provision of private medical insurance.
2 Annual performance bonus relates to bonus amounts paid in 2020 and 2019 in respect of the prior year performance period (inclusive of any amounts deferred into shares).
3 LTIP awards granted in prior years were based on TSR performance measured over two, three year performance periods (ending on 31 December and 31 May respectively). For the purposes of disclosure in the single figure table above, the LTIP value for 2018 comprises (a) shares vesting under the 2015 LTIP based on performance over the three year period to 31 May 2018 and (b) shares vesting under the 2016 LTIP award based on performance to 31 December 2018. The value of the latter has been restated based on the share price at vesting of 510 pence. The LTIP value for 2019 comprises (a) 2016 Award – shares vesting based on performance over the three year period to 31 May 2019 and (b) 2017 LTIP award – shares expected to vest later in 2020 based on the first tranche measured over the three year period to 31 December 2019. In relation to the latter, the value shown is based on an average share price in the final quarter of 2019 of 484 pence. Dividend equivalents are included within these figures. Further details are provided below.
4 Includes the value of all employee share incentives.

Executive Directors' annual bonus awards

For 2019, the annual bonus plan sought to incentivise the achievement of: improvement in safety performance through various initiatives; improvement in operational performance through volume and cost of production measures; financial profitability through EBITDA and Free Cash Flow; and strategic developments.

The structure of the bonus was weighted such that 70% was based on operational and financial measures and 30% based on strategic developments. Strategic developments included advancing the Baimskaya project in accordance with the Board approved plan supported by financing of at least $400 million, developing the Aktogay expansion project in accordance with the schedule and improving the culture of the organisation, to better position the Group for future growth.

The maximum bonus potential for Oleg Novachuk and Andrew Southam for 2019 was 150% of salary.

The Committee assessed each discrete element of the annual bonus plan separately. Within each element, the Committee considered a number of sub-elements and formed a rounded assessment of the performance of the executive Directors at the end of the year.

Awards were also subject to a safety override, enabling them to be scaled back to reflect the Group's safety performance. Metrics included a reduction in the number and frequency of fatalities and progress against safety improvement initiatives.

Performance assessment for 2019 annual bonus

Under the operational and financial elements of the bonus metrics the Group achieved EBITDA of $1,355 million, Free Cash Flow of $411 million, copper production of 311 kt and maintained its position in the first quartile of the global cost curve with a gross cash cost of copper of 140 USc/lb.

The Baimskaya copper project was progressed according to plan in 2019, with work continuing on the bankable feasibility study and pioneer construction works commencing on-site in the second half of the year.

The Aktogay expansion project progressed well in 2019 and is currently on schedule and on budget to deliver first production in 2021 at a project budget of $1.2 billion, in line with market guidance.

The Group launched its Goal Zero plan this year which includes a target to eliminate fatal incidents and lost time injuries. It seeks to unite employees, supervisors, management and the Board behind the aim of reducing health, safety and environmental incidents to zero. There were however two fatalities in 2019 in the East Region.

The Company continues to invest in the training of our people and this year employees each received an average of 70 hours of training (2018: 62 hours). The Company also welcomed around 250 new graduates to our apprenticeship programme at Aktogay, as part of succession planning for the future operators of our assets.

Performance measure	Weighting (as a % of total bonus)	Performance v. targets range: Threshold	Target	Maximum	Year-end outcome	Pay out (% max bonus)
EBITDA	25%	$1,061 million	$1,179 million	$1,297 million	$1,355 million	25%
Free Cash Flow	5%	$401 million	$445 million	$490 million	$411 million	1%
Copper production	20%	270 kt	300 kt	330 kt	311 kt	14%
Gross cash cost of copper	20%	168 USc/lb	153 USc/lb	138 USc/lb	140 USc/lb	18%
Sub-total	**70%**					**58%**

	Weighting (as a % of total bonus)	Performance v. targets range: Key objectives	Overview of achievements	Payout (% max bonus)
Strategic developments	30%	Development of Aktogay expansion project	The project is on time and on budget to deliver first production in 2021.	21%
		Advance the Baimskaya copper project supported by additional funding of >$400 million	The Baimskaya copper project was progressed according to plan in 2019. $700 million of new debt facilities were obtained.	
		Culture and people to be improved to better position the Group for future growth	Improvements including launch of Goal Zero, apprenticeship scheme, focus on employee training and succession planning under the LDP.	
Safety scale-back				11% of the award
Total bonus (as % of maximum)	**100%**			**70%**

As noted elsewhere in this Annual Report and Accounts, the business continues to make good progress in driving through positive changes to safety, including the safety culture, however the Committee determined that a safety scaleback should be applied to the bonus award primarily due to the fatalities which took place during the year. This resulted in a scaleback of 11% of the bonus award.

Taking into account overall performance during the year, the Committee was satisfied that the overall bonus outcome was appropriate and a fair reflection of achievements during the year.

Andrew Southam is required to defer one third of any bonus earned into KAZ Minerals shares for a period of two years.

Executive Directors' Long Term Incentive Plan awards

Awards granted to executive Directors under the LTIP in 2016 and 2017 were subject to a relative TSR performance condition, with TSR measured against a bespoke group of global mining companies over two different performance periods consistent with the approach and vesting schedule from prior years. The vesting outcome for the 2016 and 2017 awards is summarised in the table below:

2016 LTIP award	Weighting (as a % of total award)	Performance period	Performance	Vesting
Sub-award 1	50%	3 years to 31 December 2018	Above upper-quartile (performance disclosed in 2018 Remuneration report)	100%
Sub-award 2	50%	3 years to 31 May 2019	Above upper-quartile	100%
Total vesting				100%
2017 LTIP award				
Sub-award 1	50%	3 years to 31 December 2019	Above upper-quartile	100%
Sub-award 2	50%	3 years to 31 May 2020	N/A	*
Total vesting				*

* Final vesting will be determined following the end of the performance period for the second sub-award.

For the 2017 LTIP award, the first sub-award is subject to TSR performance measured over the period from 1 January 2017 to 31 December 2019. Over this period the Company has outperformed peers in terms of total shareholder return, a period over which copper production grew from 144 kt in 2016 to 311 kt in 2019, Gross EBITDA grew from $492 million to $1,355 million, Free Cash Flow went from negative $60 million to $411 million and the gross cash cost of copper fell from 156 USc/lb to 140 USc/lb. The Company was positioned in 5th place against the comparator group and this is reflected in the values achieved from the plan.

The vesting outcome for the second sub-award of the 2017 LTIP award is based on TSR performance measured over the period from 1 June 2017 to 31 May 2020 and will therefore be assessed at a later date. The 2017 award (including any vesting of the first sub-award) will be eligible for vesting during 2020, after the assessment of performance over both periods. The Committee considered the underlying performance of the Group during the performance period and concluded the proposed vesting outcome was appropriate.

The 2016 Award with performance period ending 31 May 2019 was granted on 4 March 2016 when the share price was 182 pence. At the end of the performance period of the second tranche the share price was 510 pence. This equated to an increase in value of 328 pence per vested share.

The 2017 Award with performance period ending 31 December 2019 was granted on 3 March 2017 when the share price was 520 pence. The three month average share price during the base period for TSR assessment was 326 pence. The average share price in the final quarter of 2019 was 484 pence.

Executive Directors' interests in the Long Term Incentive Plan

Awards granted during 2019

In 2019, awards equivalent to 150% of salary were granted to Oleg Novachuk and Andrew Southam subject to a TSR performance condition which requires the Company to deliver a median ranking (threshold vesting) rising on a straight-line basis to an upper quartile TSR ranking (full vesting) relative to a peer group of mining companies. The awards were split into two sub-awards measured over two separate performance periods, 1 January 2019 to 31 December 2021 and 1 June 2019 to 31 May 2022. The averaging period for calculating TSR, will be three months leading up to the start and the end of the performance period of each sub-award.

As disclosed in last year's Annual report on remuneration, Andrew Southam received an additional award of 50% of salary in view of his appointment to the role of Chief Executive Officer, to increase alignment with our shareholders and to ensure that his reward was clearly linked to delivery of key strategic priorities over the medium to long term.

Executive Director	Type of award	Basis of award granted	Number of shares awarded	Face value of award £000[1]	% of face value which vests at threshold
Oleg Novachuk	Nil-cost option	150% of salary	192,181	1,284	25
Andrew Southam	Nil-cost option	200% of salary	190,833	1,275	25

1 The face value of the awards granted in March 2019 was based on a five day average share price commencing immediately after the announcement of the Group's preliminary results of 668 pence which was used to determine grant levels. The awards were made on 1 March 2019 when the share price was 662 pence.

The Committee has discretion to amend the payout should any formulaic output be inappropriate (e.g. unreflective of underlying performance). Where the provision is utilised the Committee will seek to explain clearly the basis for this decision.

All outstanding awards

Executive Director	Date of award	Date of vesting	Number of shares conditionally awarded as at 1 January 2019	Market value used to determine grant level	Awards made during the year	Awards vested during the year	Awards lapsed during the year	Awards exercised during the year	Number of shares under award as at 31 December 2019[1]
Oleg Novachuk	4 March 2016	1 June 2019	786,042	163p	–	786,042	–	(786,042)	–
	3 March 2017	1 June 2020	239,596	536p	–	–	–	–	239,596
	2 March 2018	1 June 2021	150,112	855p	–	–	–	–	150,112
	1 March 2019	1 June 2022	–	668p	192,181	–	–	–	192,181
Andrew Southam	7 March 2014	1 June 2017	160,658	293p	–	–	–	(160,658)	–
	6 March 2015	1 June 2018	210,058	226p	–	–	–	(210,058)	–
	4 March 2016	1 June 2019	313,743	163p	–	313,743	–	(313,743)	–
	3 March 2017	1 June 2020	95,633	536p	–	–	–	–	95,633
	30 June 2017	1 June 2020	62,373	493p	–	–	–	–	62,373
	2 March 2018	1 June 2021	146,137	855p	–	–	–	–	146,137
	1 March 2019	1 June 2022	–	668p	190,833	–	–	–	190,833

1 The table shows the maximum number of shares that could be released if awards were to vest in full. Participants do not receive dividends on unvested shares but a dividend equivalent will be paid to participants after the transfer to them of vested shares.

Deferred Share Bonus Plan ('DSBP') awards granted during 2019

On 29 March 2019, nil-cost options were awarded to Andrew Southam in accordance with the Company's 2017 Deferred Share Bonus Plan. Details of the awards are set out below.

Executive Director	Type of award	Number of shares awarded	Face value of award £000[1]
Andrew Southam	Nil-cost option	33,609	209

1 The face value of the awards is calculated by multiplying the number of shares over which the award was granted by 623 pence, the average closing share price for each of the five business days prior to the date of grant.

Deferred shares are not subject to any additional performance measures after the application of the performance measures which determined the amount of the annual bonus award earned. Awards will vest two years from the date of grant.

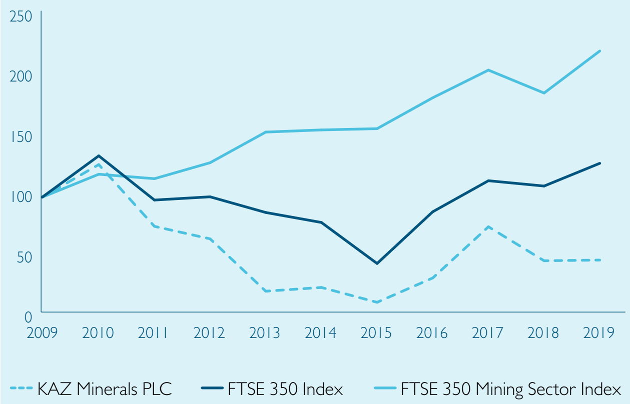
External appointments

No executive Director held a non-executive directorship of another company during 2019.

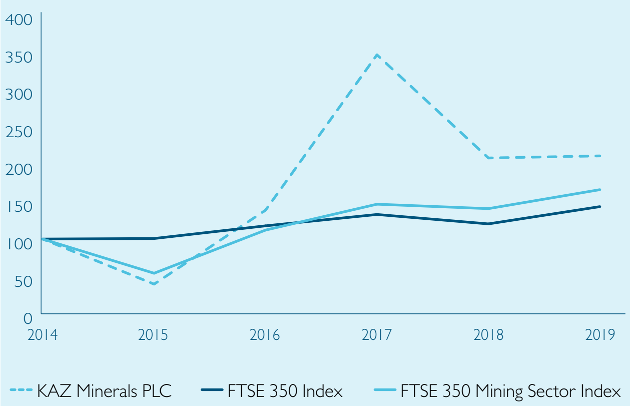
Total Shareholder Return performance graph

The following graphs show the value, at 31 December 2019, of £100 invested in KAZ Minerals PLC shares on 31 December 2009 and on 31 December 2014 respectively, compared with an equivalent investment in the FTSE 350 Index and FTSE 350 Mining Sector Index. These indices were chosen as they are broad-based indices and are widely recognised performance comparisons for large UK mining companies.

10 year



5 year



Remuneration of highest paid executive Director

The table below shows the total remuneration figure for the highest paid executive Director (i.e. the executive Chair for 2009 to 2012, the Chief Executive Officer for 2013 to 2017 and the Chair in 2018 and 2019). The total remuneration figure includes the annual bonus and LTIP awards which vested based on performance in those years. The annual bonus and LTIP percentages show the payout for each year as a percentage of the maximum.

	Total remuneration (£000)	Annual bonus (%)	LTIP vesting (%)
2009[1]	1,801	71	–
2010[1]	1,736	58	–
2011[1]	1,768	50	–
2012[1]	1,676	40	–
2013[2]	1,458	35	–
2014[2]	1,587	57	–
2015[2]	1,715	67	–
2016[2]	2,538	67	44
2017[2]	5,828	77	100
2018[3]	6,328	67	100[4]
2019[3]	4,396	70	100[5]

1 Relates to the remuneration of Vladimir Kim, executive Chair at that time.
2 Relates to the remuneration of Oleg Novachuk, Chief Executive Officer at that time.
3 Relates to the remuneration of Oleg Novachuk, Chair at that time.
4 This represents half of the LTIP award granted in 2015 which has vested and the first tranche of the 2016 LTIP which vested in 2019.
5 This represents half of the LTIP award granted in 2016 which has vested and the expected vesting later in 2020 of the first tranche of the LTIP award granted in 2017 measured over the three year period to 31 December 2019.

Percentage change in remuneration levels and comparison to wider employee pay levels

The following table shows the movement in the salary, benefits and annual bonus for the Chief Executive Officer between the current and previous financial year compared to that for the average UK employee. The Committee has chosen this comparator as it feels that it provides a more appropriate reflection of the earnings of the average worker than the movement in the Group's total wage bill, which is distorted by movements in the number of employees, variations in wage practices in Kazakhstan and exchange rates. For the benefits and bonus per employee, this is based on those employees eligible to participate in such schemes.

Chief Executive Officer	% change
Salary	2
Benefits	14%
Bonus[1]	13%

Average per employee	
Salary	2
Benefits[2]	16%
Bonus[1]	-3%

1 Bonus relates to percentage change in bonus amounts paid in 2018 against 2019 in respect of the prior year performance period.
2 Average benefits per employee were less than £1,000 per person in both 2019 and the prior year.

The Committee considers the pay structures across the wider Group workforce when setting the remuneration policy for executive Directors.

The Group's principal operations are currently in Kazakhstan and it employs fewer than 35 staff in the UK head office, therefore the Company is not subject to the UK disclosure requirements relating to gender pay or new disclosure requirements relating to the ratio between the CEO pay and wider employee pay levels. Differing pay practices across jurisdictions makes cross-border comparisons inappropriate, however, the Committee is mindful of the rationale for the external focus on these metrics, and the underlying societal issues continue to form part of the debate in Committee meetings. It intends to continue tracking these metrics internally and will keep the approach to disclosure in future reports under review.

Relative importance of spend on pay

The table below shows the movement in the total cost of remuneration in the Group, the total cost of remuneration for Directors as well as dividend distributions to shareholders and capital expenditure.

Spend on pay (£ million)	2019	2018	% change
Overall expenditure on Group employees' pay	171	138	24
Overall expenditure on pay for executive Directors	7	10	-27%
Distribution by way of dividends	37	20	83%
Capital expenditure	1,012	465	118 %

Overall expenditure on pay for executive Directors is shown in the table above as £7 million. The amount is the aggregate figure for the executive Directors within the executive Directors' remuneration table on page 109.

Capital expenditure is shown in the table above as Directors have a choice of whether to distribute profits and cash flows by way of dividend, or reinvest these in the asset base to maintain or improve the Group's operations.

Dilution of share capital

During the year the Company's share based plans have not used shares from the Employee Benefit Trust but have used 1,859,786 shares held in treasury to satisfy vesting under the schemes and such shares count towards the limits on the number of new shares which may be issued under the rules of the schemes.

Employee Benefit Trust ("EBT")

The EBT was established to acquire ordinary shares in the Company, by subscription or purchase, from funds provided by the Group to satisfy rights to shares arising on the exercise of awards under the Group's share-based incentive plans. The trustees of the EBT have informed the Company that their intention is to abstain from voting in respect of the KAZ Minerals shares held in the trust. As at 31 December 2019, 5,162 shares were held by the EBT. No shares were purchased by the EBT during the year. In total the trust holds less than 0.33% of outstanding LTIP and DSBP awards. The Company plans to satisfy the majority of vested share awards with treasury shares going forward. The maximum number of shares held by the EBT during the year was 5,162 at 1 January 2019 which was 0.001% of the issued capital carrying voting rights. No KAZ Minerals shares were disposed of by the EBT in the year.

All-employee share schemes

From January 2017 the Share Incentive Plan was closed for further contributions and no further SAYE invitations are intended to be issued.

Non-executive Directors' fees and expenses

Fees and expenses paid to non-executive Directors during the year ended 31 December 2019 are set out below:

	2019			2018		
Directors	Fees £000	Expenses £000	Total £000	Fees £000	Expenses £000	Total £000
Lynda Armstrong [1]	111	4	115	107	4	111
Vladimir Kim[2]	454	–	454	454	–	454
Michael Lynch-Bell	225	–	225	225	–	225
John MacKenzie	113	–	113	113	–	113
Charles Watson	117	–	117	117	–	117
Alison Baker[3]	99	3	102	97	2	99

1 In 2019 the fee for the Chair of the Remuneration Committee was increased from £8,000 per annum to £12,000 per annum.

2 In 2018 and 2019, in addition to his fee of £84,000 as a non-executive Director, Vladimir Kim received an advisory fee of £370,000 for assisting and supporting the Company in its dealings with the Government and regional authorities in Kazakhstan.

3 Alison Baker became Chair of the Audit Committee in May 2018.

Directors' interests in ordinary shares

The beneficial interests of the Directors and their closely associated persons ('CAPs') who held office at 31 December 2019 in the Company's ordinary shares as at that date and 1 January 2019 are shown in the table below:

Directors[1]	Ordinary shares beneficially owned at 1 January 2019	Ordinary shares beneficially owned at 31 December 2019	Vested LTIP awards	Vested DSBP awards	Outstanding LTIP awards	Outstanding DSBP awards	Vested UK Sharesave Plan options	Position against guideline as at 31 December 2019[3]
Lynda Armstrong	6,500	8,500	–	–	–	–	–	–
Vladimir Kim[4]	149,306,795	149,306,795	–	–	–	–	–	–
Michael Lynch-Bell	12,000	12,000	–	–	–	–	–	–
John MacKenzie	5,000	5,000	–	–	–	–	–	–
Oleg Novachuk[5]	35,986,372	36,772,414	–	–	581,889	–	–	exceeds guideline
Andrew Southam	220,481	675,895	–	–	494,976	55,084	–	exceeds guideline
Charles Watson	10,544	13,790	–	–	–	–	–	–
Alison Baker	3,500	3,500	–	–	–	–	–	–

1 No changes in Directors' interests occurred in the period 1 January 2020 to 19 February 2020 other than the completion of the holding period in respect of 37 matching shares under Andrew Southam's Share Incentive Plan on 20 January 2020, increasing his total holding to 675,932 shares.

2 The closing market price of the Company's shares at 31 December 2019 was 532 pence and the range for the year was 436 pence to 1,076 pence.

3 Executive Directors are required to build up a holding of ordinary shares in the Company worth at least 200% of salary within a five year period from their date of appointment. As set out in the table above, both Oleg Novachuk and Andrew Southam exceed the shareholding requirement.

4 Since 2012, 90,805,063 of his ordinary shares in the Company have been pledged to support loans.

5 Since 2011, 34,923,423 of his ordinary shares in the Company have been pledged to support loans.

Composition of the Remuneration Committee

The members of the Committee during 2019 were Lynda Armstrong, Michael Lynch-Bell and Charles Watson. Lynda Armstrong is Chair of the Committee. Where appropriate, executive Directors are invited to attend meetings to provide information and advice to the Committee to enable it to make informed decisions. Individuals are however, specifically excluded from any matter concerning their own remuneration. Representatives of Deloitte, the Committee's retained adviser, also attend meetings by invitation. The Company Secretary attends meetings as secretary to the Committee.

Attendance at Remuneration Committee meetings

The Committee had three scheduled meetings in 2019, with each member attending as follows:

Member	Committee member since	Attendance at scheduled meetings during 2019
Lynda Armstrong	21 October 2013	3/3
Michael Lynch-Bell	7 May 2015	3/3
Charles Watson	17 May 2013	3/3

Role of the Remuneration Committee

The Committee is primarily responsible for determining and recommending to the Board the framework for executive remuneration and for determining, on behalf of the Board, the remuneration of executive Directors and the next tier of management below the Board.

The Committee's updated terms of reference are available to view on the Company's website (www.kazminerals.com). The Committee's principal responsibilities are summarised below:

- determining and agreeing with the Board the framework for executive remuneration that ensures executive Directors and a wider remit of senior managers are provided with appropriate incentives to encourage enhanced performance and are rewarded in a fair and responsible manner for their individual contribution towards the success of the Company;
- ensuring that the remuneration policy is appropriate and consistent with effective risk management and where appropriate, taking into account the views of the Group's stakeholders;
- reviewing workforce remuneration and related policies and taking these into account when setting policy for executive remuneration;
- within the agreed framework, setting and determining the total individual remuneration arrangements for executive Directors and certain senior managers, giving due regard to individual and Company performance, and remuneration trends across the Group;
- approving the design of, and determining the targets for, any performance-related plans and the total annual payments made under such plans to executive Directors and senior managers;
- determining any share incentive plan performance targets; and
- determining the terms of employment and remuneration of each executive Director and senior managers, including recruitment and termination arrangements.

Committee activities in 2019

At its meetings during the year the Committee amongst other matters:

- reviewed current trends in remuneration practice and institutional investors' current guidelines on executive compensation;
- set, reviewed, engaged with shareholders about and agreed to approve, individual remuneration arrangements for executive Directors and certain senior managers;
- considered remuneration trends across the wider Group;
- assessed the level of achievement against objectives under the annual bonus plan and LTIP;
- considered performance measures and targets to be used under the annual bonus plan and LTIP for 2020;
- reviewed and approved the Directors' remuneration report;
- reviewed the Committee's performance; and
- reviewed and amended the Directors' remuneration policy ahead of the 2020 Annual General Meeting, to ensure compliance with the Code and any new regulatory requirements.

Priorities for 2020

For the coming year, it is anticipated that the Committee will focus on the following areas:

- ensuring that remuneration arrangements continue to promote the long-term success of the Company, with a focus on the link between performance and reward, whilst maintaining a prudent approach to cost and the risk to the business;
- ensuring compliance with regulatory requirements;
- reviewing and assessing the ongoing appropriateness of current executive remuneration plan designs and targets;
- ongoing training of Committee members; and
- reviewing the competitiveness and effectiveness of the external adviser.

Management of risk in remuneration arrangements

The Committee periodically commissions a detailed assessment of the risk environment surrounding the Company's current remuneration arrangements for executive Directors and certain senior managers. The latest assessment determined that remuneration arrangements were broadly compatible with the Company's risk policies and systems. In addition, malus and clawback provisions which were expanded for incentive awards from 2019 onwards, so that they can be applied in instances of serious reputational damage to the Group and of serious corporate failure have been enshrined in the policy in conjunction with the scope to vary outcomes from incentive awards where formulaic outcomes are inappropriate. The introduction of a post-employment shareholding guideline will further align Directors' interests with long-term decision making. Overall, the Committee remains satisfied that the remuneration policy is aligned with the long-term needs of the business and that incentive quantum, structure and objectives do not encourage short-term measures or excessive risk-taking.

The Committee draws upon the relevant experience and knowledge of its members to ensure that it benefits from the positions they hold at the Company. The Committee includes Michael Lynch-Bell, Deputy Chair and Senior Independent Director and Charles Watson, Chair of the Health, Safety and Sustainability Committee. The Chair, Chief Executive Officer and when appropriate Group Director of Human Resources, attend Committee meetings by invitation, and provide a link to the Executive Committee. The leveraging of such experience and knowledge enables the Committee to have an oversight of risk factors that may be relevant to remuneration arrangements and target setting specifically.

External adviser

The Committee has authority to obtain the advice of external independent remuneration consultants. It is solely responsible for their appointment, retention and termination and for approval of the basis of their fees and other terms. The current advisers Deloitte, were appointed by the Committee following a competitive tender process. During 2019, Deloitte's fees for supporting the Committee were £61,000. Deloitte also provides advice to the Company on tax and human resources advisory services in the Group's overseas subsidiaries. It is a signatory to the Remuneration Consultants' Group Code of Conduct. The Committee regularly reviews the external adviser relationship and is comfortable that Deloitte's advice remains objective and independent.

Statement of shareholder voting

At the Annual General Meeting held on 2 May 2019, the advisory vote on the Annual Report on Remuneration received the following votes from shareholders:

Annual Report on Remuneration 2018

Votes for	344,432,498	97.22%
Votes against	9,836,899	2.78%
Total votes cast	354,269,397	100.00%
Votes withheld	17,109	

Remuneration Policy 2017

The remuneration policy was approved by shareholders at the 2017 Annual General Meeting and received the following votes from shareholders:

Votes for	252,646,978	99.47%
Votes against	1,354,344	0.53%
Total votes cast	254,001,322	100.00%
Votes withheld	14,761	

OTHER STATUTORY INFORMATION

UK Listing Rule disclosures

Information required to be disclosed pursuant to Listing Rule 9.8.4R may be found on the following pages

Information	Annual Report section	Page
Shareholder waivers of future dividends	Other statutory information	116
Details of long term incentive schemes	Directors' report	107-108
Information required by LR 9.2.2AR (2)(a) – Relationship agreements	Other statutory information	117
Statement of capitalised interest	Financial statements	145
Contract for the provision of services by major shareholder	Financial statements	165

Directors

In accordance with the Code, all Directors will retire and submit themselves for re-election at the Company's forthcoming Annual General Meeting. Details of Directors' contracts or letters of appointment are included in the Directors' Remuneration Report on pages 108.

During the year, no Director had any interest in any shares or debentures in the Company's subsidiaries, or any material interests in any contract with the Company or a subsidiary, being a contract of significance in relation to the Company's business, with the exception of certain contracts between Group companies and Vladimir Kim as disclosed in note 35 on page 165.

Directors' indemnity and insurance

KAZ Minerals maintains liability insurance for its Directors and Officers. The Company has also granted indemnities to each of the Directors, the Chief Financial Officer and the Company Secretary to the extent permitted by law.

Dividends

The Board recommends the payment of a final dividend for the year ended 31 December 2019 of 8 US cents per ordinary share (2018: US 6 cents per ordinary share). If approved, the dividend will be paid on 22 May 2020 to shareholders on the UK register of members at the close of business in the UK on 24 April 2020. An interim dividend of 4 US cents per ordinary share was paid on 25 October 2019, bringing the total dividend for 2019 to 12 US cents per ordinary share.

The Employee Benefit Trust (EBT) waived the right to receive dividends due or to become due at any time in the future on shares held by it on behalf of share plan participants employed by the Group.

Annual General Meeting

The Company's Annual General Meeting will be held at 12.15pm on Thursday 30 April 2020 at the offices of Linklaters LLP, One Silk Street, London EC2Y 8HQ, United Kingdom. Details of the meeting venue and the resolutions to be proposed, together with explanatory notes, are set out in a separate Notice of Annual General Meeting which accompanies this Annual Report and Accounts. A summary of the business carried out at the Annual General Meeting will be published on the Company's website (www.kazminerals.com).

Share capital

As at 31 December 2019, the Company's issued share capital was 480,723,977 ordinary shares of 20 pence each, credited as fully paid, following the issue of 22,344,944 new ordinary shares to the Vendor on 22 January 2019 as part of the Initial Consideration on the acquisition of Baimskaya copper project. The Company holds 8,287,104 ordinary shares in treasury and the issued share capital of the Company which carries voting rights of one vote per share comprises 472,436,873 ordinary shares (excluding treasury shares). Further details of the Company's issued share capital are shown in note 24 on page 152.

The Group has its primary listings on the London and Kazakhstan Stock Exchanges.

A list of the Group's subsidiary undertakings and their principal activities is given in note 39(i) beginning on page 178.

Purchase of own shares

The Company was authorised by shareholders at the 2019 Annual General Meeting to purchase its own shares on the market within certain limits. In the period since the 2019 Annual General Meeting, the Company has not purchased any shares under this authority. The Board will seek shareholders' approval to renew the authority to make market purchases of the Company's shares at the forthcoming Annual General Meeting.

Major shareholdings

As at 19 February 2020, the Company had been notified under Rule 5.1.2 of the FCA's Disclosure and Transparency Rules of the following interests in its total voting rights:

Name of holder	Number of ordinary shares of 20 pence each held	Percentage of total voting rights held as at 19 February 2020
Vladimir Kim	149,306,795	31.60%
Oleg Novachuk	35,986,372	7.65%
Aristus Holdings Limited	22,344,944	4.73%
Maxim Vorobyev	14,204,036	3.01%

Relationship agreements

As required by Listing Rule 9.2.2ADR(1), on 23 July 2014, the Company entered into: (i) an amended and restated relationship agreement (originally entered into on 26 September 2005) with Cuprum Holding Limited, Perry Partners S.A. and Vladimir Kim; and (ii) a relationship agreement with Stansbury International Limited and Eduard Ogay.

In accordance with Listing Rule 6.5.4R, each relationship agreement establishes that all transactions between the Company and the controlling shareholder are undertaken on an arm's length basis and on normal commercial terms, that neither the controlling shareholder nor its associates will cause the Company to breach or circumvent the Listing Rules or prevent the Company from complying with its obligations under the Listing Rules and that neither the controlling shareholder nor any of its associates will propose or procure the proposal of a shareholder resolution which is intended or appears to be intended to circumvent the proper application of the Listing Rules.

Under the relationship agreement with Vladimir Kim, inter alia, there must be a majority of independent Directors on the Board and on all its standing committees, and no material transaction may be entered into without approval of the independent Directors.

Each relationship agreement will continue as long as the ordinary shares are listed on the premium segment of the Official List and traded on the London Stock Exchange and will terminate should the relevant shareholder cease to be a 'controlling shareholder' as defined in the Listing Rules. The Company has complied with the independence provisions included in the relationship agreements and, so far as the Company is aware, such provisions have been complied with during the period under review by the controlling shareholders and their associates.

Although Eduard Ogay stepped down from the Board with effect from 31 October 2014, as he continues to be considered to be acting in concert with Vladimir Kim for the purposes of the Code, details of the relationship agreement between the Company, Stansbury International Limited and Eduard Ogay have been included.

Political donations

The Group did not give any money for political purposes in the United Kingdom nor did it make any donations to EU political organisations or incur any EU political expenditure during the year. (The Group does not as a matter of policy make any political donations).

Policy on derivatives and financial instruments

The Group's objectives and policies on financial risk management, and information on the Group's exposures to foreign exchange, counterparty credit, commodity price, liquidity and interest rate risks can be found in note 33 commencing on page 158.

Legal proceedings

Neither the Company nor any of its subsidiaries is a defendant in any proceedings which the Directors believe will have a material effect on either the Company's financial position or profitability. Commitments and contingencies are disclosed in note 34 beginning on page 164.

Significant agreements – change of control

The following significant agreements contain certain termination and other rights for the counterparties upon a change of control of the Company.

Each of a $1.34 billion facility agreement and a CNY 1.0 billion facility agreement dated 16 December 2011 between KAZ Minerals Aktogay Finance Limited as borrower and China Development Bank Corporation as lender, contain terms which give the lender the right to cancel any of the commitments provided to KAZ Minerals Aktogay Finance Limited and declare all outstanding loans, together with accrued interest, and all other amounts accrued and outstanding immediately due and payable on 30 business days' notice if the Company ceases to hold (directly or indirectly) more than 50 per cent of the issued share capital of KAZ Minerals Aktogay Finance Limited and/or certain other named subsidiaries.

The terms of a $1.0 billion pre-export finance debt facility dated 20 December 2012, as amended and restated on 28 January 2020 between KAZ Minerals Finance PLC and a syndicate of banks, provide that if any person (excluding Vladimir Kim and Oleg Novachuk) or group of people acting in concert, secures control of the Company: (i) a lender under the facility shall not be obliged to fund a loan; and (ii) if a lender or lenders whose participation in the loan outstanding exceeds two-thirds of the total loan amount outstanding so require, the parties shall enter into negotiations for a period of not more than 30 days with a view to agreeing alternative terms for continuing the facility. If no alternative basis has been agreed during such period, then the lenders may cancel the commitments of the lenders to lend the facility and declare all outstanding amounts due and payable.

Each of a $1.844 billion facility agreement and a $149 million facility agreement dated 29 December 2014 between KAZ Minerals Finance PLC as borrower and China Development Bank Corporation as lender, contain terms which give the lender the right to cancel any of the commitments provided to KAZ Minerals Finance PLC and declare all outstanding loans, together with accrued interest, and all other amounts accrued and outstanding immediately due and payable on 30 business days' notice if the Company ceases to hold (directly or indirectly) more than 50 per cent of the issued share capital of KAZ Minerals Finance PLC and/or certain other named subsidiaries.

The terms of a $300 million credit facility agreement dated 14 December 2016 (increased to $900 million with a supplemental agreement dated 14 June 2019) between KAZ Minerals Aktogay LLC as borrower and Development Bank of Kazakhstan JSC as lender, provide that (i) if there is a change in the ownership structure of the borrower in an amount of 10% or more of the participating interests of the borrower, to a person or persons other than a member of the Group and without the prior written consent of the lender, it would trigger an event of default and (ii) if the Company ceases (directly or indirectly) to control less than 51 per cent of the share capital of the borrower, the lender has the right to accelerate repayment of the outstanding loans together with accrued interest and any other amounts due and payable to the lender.

The terms of a $100 million credit facility agreement dated 15 November 2019 between KAZ Minerals Finance PLC as borrower and Caterpillar Financial Services (UK) Limited as lender, provide that if any person (excluding Mr Vladimir Kim and Mr Oleg Novachuk) or group of people acting in concert, secures control of the Company: (i) a lender under the facility shall not be obliged to fund a loan; and (ii) if a lender or lenders whose participation in the loan outstanding exceeds two-thirds of the total loan amount outstanding so require, the parties shall enter into negotiations for a period of not more than 30 days with a view to agreeing alternative terms for continuing the facility. If no alternative basis has been agreed during such period, then the lender(s) may cancel the commitments of the lender(s) to lend the facility and declare all outstanding amounts due and payable.

Going concern

The Directors, having made appropriate enquiries, have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future (which is for this purpose a period of at least 12 months from the date of approval of these financial statements). Accordingly, they continue to adopt the going concern basis of accounting in preparing the consolidated financial statements.

Articles of Association

The following description summarises certain provisions of the Company's Articles of Association and applicable English law concerning companies (the Companies Act 2006). This summary is qualified in its entirety by reference to the Company's Articles of Association and the Companies Act 2006. The Company's Articles of Association may only be amended by a special resolution at a general meeting of shareholders.

Rights attaching to shares

The rights attaching to the ordinary shares of the Company are defined in the Company's Articles of Association.

Voting rights

Members may attend any general meeting of the Company. On a show of hands every member (or his/her representative) who is present in person or by proxy has one vote on each resolution and on a poll every member (or his/her representative) who is present in person or by proxy shall have one vote on each resolution for each share of which he/she is the holder.

In accordance with the Companies Act 2006, which allows multiple proxies appointed by a single member to vote on a show of hands, all substantive resolutions at general meetings will normally be put to a poll vote. Employees who participate in the Company's Share Incentive Plans (SIP) and hold shares in the SIP trusts, provide directions to the trustee to vote on their behalf by way of a form of direction.

The Company is not aware of any agreements between shareholders that may result in restrictions on voting rights.

Dividend rights

Shareholders may by ordinary resolution declare dividends but the amount of the dividend may not exceed the amount recommended by the Board.

Transfer of shares

A total of 22,344,944 ordinary shares in the Company comprising the Initial Equity Consideration on the acquisition of Baimskaya copper project were issued and allotted to the Vendor on Initial Completion on 22 January 2019 and are subject to a three-year lock-up period ending on the third anniversary of Initial Completion.

Other than as set out above, there are no restrictions on the transfer of shares other than certain restrictions as set out in the Company's Articles of Association. Transfers of uncertificated shares must be carried out using CREST and the Board can refuse a transfer of an uncertificated share in accordance with the regulations governing the operation of CREST.

The Company is not aware of any agreements between shareholders that may result in restrictions on the transfer of shares.

Powers of the Directors

The Directors are responsible for the management of the business of the Company and may exercise all powers of the Company subject to applicable legislation and regulation and the Company's Articles of Association.

Appointment and retirement of Directors

The Board shall have the power at any time to appoint any person who is willing to act as a Director, so long as the total number of Directors shall not exceed the maximum number prescribed in the Articles. Any Director so appointed shall retire at the next Annual General Meeting following such appointment. Every Director shall retire at each Annual General Meeting. A Director who retires at an Annual General Meeting (whether by rotation or otherwise) may, if willing to act, be re-appointed.

Audit information

The Directors who held office at the date of approval of this Directors' Report confirm that so far as they each are aware, there is no relevant audit information (being information needed by the external auditors in connection with preparing their audit report) of which the Company's external auditors are unaware, and each Director has taken all steps that he/she ought to have reasonably taken as a Director to make himself/herself aware of any relevant audit information and to establish that the Company's external auditors are aware of that information.

Auditors

Having reviewed the independence, objectivity and performance of the external auditors, the Audit Committee has recommended to the Board that the existing external auditors, KPMG, be re-appointed. Ordinary resolutions re-appointing them as auditors and authorising the Directors to set their remuneration will be proposed at the 2020 Annual General Meeting.

Statement of Directors' responsibilities in respect of the Annual Report and the financial statements

The Directors are responsible for preparing the Annual Report and the Group and parent company financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare Group and parent company financial statements for each financial year. Under that law they have elected to prepare the Group financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union (EU) and applicable law, and have elected to prepare the parent company financial statements in accordance with UK accounting standards and applicable law (UK Generally Accepted Accounting Practice), including Financial Reporting Standard 101 *Reduced Disclosure Framework*.

Under company law the Directors must not approve the financial statements unless they are satisfied that they give a fair and true view of the state of affairs of the Group and parent company and of their profit or loss for that period. In preparing each of the Group and parent company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable, relevant, reliable and prudent;
- for the Group financial statements, state whether they have been prepared in accordance with IFRSs as adopted by EU;
- for the parent company financial statements, state whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- assess the Group and parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and
- use the going concern basis of accounting unless they either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and parent company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and of the parent company and enable them to ensure that the financial statements comply with the Companies Act 2006.

They are responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error, and have general responsibility for taking such steps as are reasonably open to them to safeguard the assets of the Group, to prevent and detect fraud and other irregularities.

Under applicable law and regulations, the Directors are also responsible for preparing a Directors' report, Directors' Remuneration report and Corporate Governance Statement that comply with that law and those regulations.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website (www.kazminerals.com). Legislation in the UK governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Responsibility statement

Each Director confirms to the best of his/her knowledge that:

- the Group accounts, prepared in accordance with IFRSs as adopted by the EU, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group and the undertakings included in the consolidation taken as a whole;
- the Company accounts, prepared in accordance with UK accounting standards including Financial Reporting Standard 101 *Reduced Disclosure Framework*, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company;
- the Strategic report and Directors' report include a fair review of the development and performance of the business and the position of the Company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and the Annual Report and Accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

The Strategic report comprising pages 1 to 73 and the Directors' report comprising pages 74 to 119, and including the sections of the Annual Report and Accounts referred to in these pages, have been approved by the Board and signed on its behalf by:

Susanna Freeman
Company Secretary
19 February 2020

Registered Office
6th Floor, Cardinal Place
100 Victoria Street
London, SWIE 5JL
United Kingdom

Registered in England and Wales
No. 05180783

INDEPENDENT
AUDITOR'S REPORT

to the members of KAZ Minerals PLC

1. Our opinion is unmodified

We have audited the financial statements of KAZ Minerals PLC ("the Company") for the year ended 31 December 2019 which comprise the consolidated statement of total comprehensive income, consolidated balance sheet, consolidated statement of cash flows, consolidated statement of changes in equity, Company balance sheet, Company statement of changes in equity, and the related notes, including the accounting policies in note 38.

In our opinion:

- the financial statements give a true and fair view of the state of the Group's and of the parent Company's affairs as at 31 December 2019 and of the Group's profit for the year then ended;
- the Group financial statements have been properly prepared in accordance with International Financial Reporting Standards as adopted by the European Union (IFRSs as adopted by the EU);
- the parent Company financial statements have been properly prepared in accordance with accounting standards, including FRS 101 Reduced Disclosure Framework; and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion. Our audit opinion is consistent with our report to the Audit Committee.

We were first appointed as auditor by the shareholders on 15 May 2012. The period of total uninterrupted engagement is for the eight financial years ended 31 December 2019. We have fulfilled our ethical responsibilities under, and we remain independent of the Group in accordance with, UK ethical requirements including the FRC Ethical Standard as applied to listed public interest entities. No non-audit services prohibited by that standard were provided.

2. Key audit matters: our assessment of risks of material misstatement

Key audit matters are those matters that, in our professional judgment, were of most significance in the audit of the financial statements and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by us, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. We summarise below the key audit matters, in decreasing order of audit significance, in arriving at our audit opinion above, together with our key audit procedures to address those matters and, as required for public interest entities, our results from those procedures. These matters were addressed, and our results are based on procedures undertaken, in the context of, and solely for the purpose of, our audit of the financial statements as a whole, and in forming our opinion thereon, and consequently are incidental to that opinion, and we do not provide a separate opinion on these matters.

Overview

Materiality: Group financial statements as a whole	\$25 million (2018: \$27 million) 3.4% (2018: 4.2%) of Group profit before tax
Coverage	96% (2018: 99%) of Group profit before tax

Key audit matters in 2019 compared to the prior year

Recurring risks	Going concern	No change
	Bribery and corruption	Increased
	*Asset carrying amounts	Increased
Parent Company specific risk	Investment in subsidiaries carrying amount	No change

* In 2018, the risk regarding asset valuation was specific to the Bozymchak asset for which an impairment test was performed. In 2019, the risk is related to the identification of impairment indicators across the Group's operating and development assets, including the Baimskaya assets acquired in January 2019.

	The Risk	Our response
Going concern Refer to page 92 (Audit Committee Report) and page 132 (financial disclosures).	**Appropriateness of disclosure** Note 2(a) to the financial statements explains how the Directors have formed a judgement that use of the going concern basis is appropriate in preparing the financial statements of the Group and parent Company. That judgement is based on an evaluation of the inherent risks to the Group's and Company's business model and how those risks might affect the Group's and Company's financial resources or ability to continue operations over a period of at least a year from the date of approval of the financial statements. At the planning stage of our audit the risks most likely to adversely affect the Group's and Company's available financial resources over this period were: • The ability of the Group to secure an extension to its pre-export finance loan facility to provide adequate financing to meet planned capital expenditure and maintain adequate headroom; • The ability to defer planned capital expenditure should the new financing not be obtained or be delayed; and • The inherent estimation uncertainty in the assumptions used in the Group and Company's business model, particularly in respect of copper pricing. Following the extension to the pre-export finance loan facility on 28 January 2020 the key risk was the inherent estimation uncertainty in the assumptions used in the Group and Company's business model, particularly in respect of copper pricing and volumes, which may themselves be affected by Chinese demand and the effect of the Covid-19 coronavirus. The risk for our audit was whether or not those risks were such that they amounted to a material uncertainty that may have cast significant doubt about the ability to continue as a going concern. Had they been such, then that fact would have been required to be disclosed.	**Our procedures included:** • **Benchmarking assumptions:** Challenging the appropriateness of key assumptions in the cash flow projections (including commodity prices, production costs, inflation, foreign exchange, production volumes, committed and other planned capital expenditure) applying our sector knowledge and experience based on historical production information, internal mine plans and project plans, together with market and other externally available information. • **Sensitivity analysis:** We considered sensitivities over the level of available financial resources indicated by the Group's financial forecasts including the additional funding obtained in January 2020 and taking account of possible downside scenarios that could arise from these risks individually and collectively. • **Funding assessment:** Assessing the ability and requirement for additional funding and then on obtaining the extension to the pre-export finance loan facility in January 2020, examining the repayment and other terms therein, any changes to covenants and consistency with the Group's financial projections. • **Mathematical accuracy:** Checking the mathematical accuracy of the cash flow projections and recalculating the forecast covenant calculations based on the terms of the Group's borrowing facilities including the amended pre-export finance facility of $1 billion. • **Evaluating Directors' intent:** We evaluated the achievability of the actions the Directors considered in the downside scenarios. • **Assessing transparency:** We considered the appropriateness of relevant disclosures, including both the going concern disclosure in note 2(a) of the financial statements and also the commentary elsewhere in the annual report on the timing and scope of the future growth projects and the need for financing to progress these. **Our findings** We found the Group's going concern assessment and the key assumptions used therein to be balanced, and that the disclosure in note 2(a) to the financial statements is proportionate.

Bribery and corruption

Effects of irregularities:

The Group's business involves mining activities in Kazakhstan, Kyrgyzstan and, more recently, Russia following the acquisition in January 2019 of the Baimskaya assets.

Transparency International's Corruption Perceptions Index 2019 and our own experience indicates that corruption risks remain significant in these countries.

Significant amounts of expenditure continue to be incurred on the existing and new development projects, including payments in respect of social contributions.

In addition, companies in the mining sector are inherently at higher risk from bribery and corruption due to the significant level of government regulation and their procurement profile.

The risk for our audit was whether any instances of bribery or corruption have arisen or could have arisen that had not been identified and could result in material losses to the Group, or potential non-compliance with laws and regulations which might result in possible penalties and material improper payments not being identified or appropriately disclosed.

Our procedures included:

- **Policies and procedures assessment:** We assessed the appropriateness of the Group's anti-bribery and corruption policies and procedures including evaluating the tone set by the Board and by senior management, the implementation and oversight thereof across the Group and the role of the Social Investment Committee to oversee the approval of social contributions and the Group's externally managed whistleblowing programme. In particular, we assessed how such policies and procedures have been embedded in the newer operations in particular in Russia.
- **Controls design and operation:** Assessing the design and operating effectiveness of the Group's controls over the selection of third party suppliers in particular those relating to the major capital expenditure projects and the process over acknowledging acceptance of services and equipment provided by suppliers.
- **Tests of detail:**
  - Selecting a sample of transactions and journals across the Group in particular relating to third party suppliers and/or cash payments, including those that at face value appeared as though they might have been outside the normal course of business (including those with government agencies or officials);
  - Selecting a sample of instances reported via the whistleblowing programme;
  - Selecting a sample of social contributions made or approved during the period;
  - Making enquiries of senior management about each of the samples selected and validating such explanations given by inspecting related documentation or making further enquiries to investigate the nature of the instance and where relevant evaluate the business rationale for the transactions or events, confirming that appropriate approvals had been in place and actions taken to address any incidents arising from the whistleblowing programme; and
  - To ensure that where necessary for transparency purposes any such instances or payments as applicable have been appropriately disclosed.

Our findings

As a result of our procedures we did not identify material instances of non-compliance with laws and regulations or bribery and corruption and proportionate disclosure has been made in respect of these areas (2018 audit findings: none identified).

Asset carrying amounts

Refer to page 92 (Audit Committee Report), page 169 (accounting policy) and page 135 (financial disclosures).

Subjective judgement

The Group's operating assets, some of which have previously been impaired, are assessed for impairment at a CGU level which align to the operating divisions (Aktogay, Bozshakol, East Region, Bozymchak, and the projects division consisting of Koksay and Baimskaya). These assets are sensitive to changes in operational assumptions and commodity pricing and therefore the Group needs to make judgements as to whether certain events represent indicators of impairment or impairment reversal.

The assessment for impairment indicators of the Group's exploration and evaluation assets, Baimskaya and Koksay, requires the Group to exercise judgement around areas such as the economic value and the technical feasibility and can often be difficult to determine given the relatively early stage of the assets and any ongoing feasibility studies and exploration works.

Based on the assessment performed, the Group has concluded no indicators of impairment exist at the balance sheet date and therefore has not estimated the recoverable amounts of the CGUs listed above.

The risk to our audit is that should an impairment indicator be present then an impairment test would be required to be performed and could result in a material change to the carrying amounts of the assets.

Our procedures included:

- **Controls design:** Assessing the Group's controls over the identification of indicators of impairment or impairment reversal.
- **Accounting application:**
  - Evaluation of management's assessment that there are no indicators of impairment or impairment reversal of the Group's operating assets being Bozshakol, Aktogay, East Region, Bozymchak with reference to the criteria of IAS 36 "Impairment of assets".
  - Evaluation of the Group's assessment that there are no indicators of impairment of the Koksay and Baimskaya assets with reference to the criteria of IFRS 6 "Exploration for and Evaluation of Mineral Resources".
- **Benchmarking assumptions:**
  - Assessing the movement in commodity prices, inflation rates and exchange rates during the period.
  - Considering the proposed extension of exploration rights by inspecting historical extensions for Koksay and others of a similar nature.
  - Enquiring on progress of the ongoing feasibility study at Baimskaya to determine there are no matters arising that might indicate any uncertainty over the commercial and technical feasibility to develop the asset.
  - Comparing the carrying values to other market valuations including resource multiples and recent corporate transactions in the copper mining industry.

Our findings

We found the Group's assessment that there were no indicators of impairment or impairment reversal of the Group's operating assets, and no indicators of impairment of the Group's exploration and evaluation assets Koksay and Baimskaya to be balanced.

Parent Company risk:
Carrying amount of investment in subsidiaries ($4.2 billion; 2018: $4.2 billion)

Refer to page 92 (Audit Committee Report), page 176 (accounting policy and financial disclosures).

Accounting judgement:
The parent Company's investment in subsidiaries has been impaired in the past. In 2017 with the successful ramp up of the Group's projects and improved copper prices, $840 million of previous impairments were reversed.

Following the Group's announcement of the planned Baimskaya acquisition in August 2018, the Company's share price declined significantly such that the market capitalisation was lower than the net assets of KAZ Minerals PLC and the carrying value of the parent Company's investment in the Group. This remains the case at 31 December 2019. There is significant judgement in assessing whether these conditions constitute an impairment trigger.

The Directors consider that there has been no impairment trigger, as the share price decline since August 2018 is not reflective of a decline in the value of the underlying assets as there has been no fundamental changes in the long-term value of the existing operations.

More broadly, based on the assessment performed the Group has concluded that no indicators of impairment exist as at 31 December 2019.

Consequently they did not perform a detailed impairment review in respect of the carrying amount of the Company's investment in subsidiaries as at 31 December 2019.

Our procedures included:

- **Our sector experience:** Performing our own search for indicators of impairment by analysing the performance of the Group's operational CGUs and evaluating changes in analysts' long-term expectations of commodity prices in particular copper.
- **Our sector experience:** Continue to challenge the Group's conclusion that the share price decline did not represent an impairment indicator by reconsidering the key drivers for the share price decline and comparing it to share price movements of market competitors.
- **Tests of detail:** Comparing the carrying amount of the investments with the relevant subsidiaries' balance sheets used for Group consolidation purposes to identify whether their net assets, being an approximation of their minimum recoverable amount, were in excess of their carrying amount and assessing whether those subsidiaries have historically been profit-making.
- **Assessing subsidiary audits:** Assessing the work performed for group audit purposes on those subsidiaries and considering the results of that work on those subsidiaries' profits and net assets.

Our findings
In determining whether any impairment triggers exist that would require the Group to estimate the recoverable amount of the parent Company's carrying value of investment in subsidiaries there is room for judgement and we found that, while acceptable, the Group's judgement gave slightly more weight to arguments favouring a conclusion that there were no triggers.

3. Our application of materiality and an overview of the scope of our audit

Materiality for the Group financial statements as a whole was set at $25 million (2018: $27 million), determined with reference to a benchmark of Group profit before tax of $726 million, of which it represents 3.4% (2018: $4.2%).

Materiality for the Company financial statements as a whole was set at $20 million (2018: $21 million), determined with reference to component materiality set by the group audit team. This is lower than the materiality we would otherwise have determined by reference to total assets, and represents 0.4% of the Company's total assets (2018: 0.5%).

We agreed to report to the Audit Committee any corrected or uncorrected identified misstatements exceeding $1.25 million (2018: $1.3 million), in addition to other identified misstatements that warranted reporting on qualitative grounds.

Of the Group's 40 (2018: 37) reporting components, we subjected 11 (2018: 13) to full scope audits and 3 (2018: nil) for specific audit procedures for Group purposes. The components within the scope of our work accounted for the percentages illustrated below.

For the residual components, we performed analysis at an aggregated Group level to re-examine our assessment that there were no significant risks of material misstatement within these.

The group team instructed component auditors as to the significant areas to be covered, including the relevant risks detailed above and the information to be reported back. The group team approved the component materiality, which ranged from $0.5 million to $20 million (2018: $0.45 million to $24 million), having regard to the mix of size and risk profile of the Group across the components. The work on 8 of the 14 components (2018: 4 of the 13 components) was performed by component auditors and the rest, including the audit of the Company, was performed by the group team.

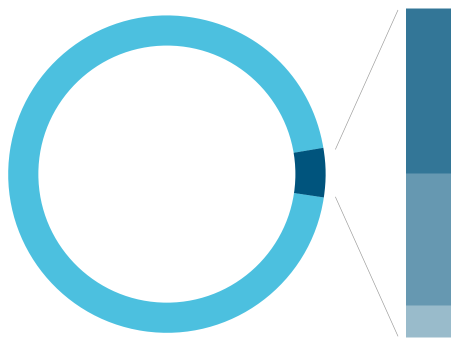
The group team visited the Kazakhstan, Kyrgyzstan and Russia component teams on four (2018: three) separate occasions to assess the audit risk and strategy. Telephone conference meetings were also held with these component auditors frequently throughout the year. At these visits and meetings, the findings reported to the group team were discussed in more detail, and any further work required by the group team was then performed by the component auditor.

Profit before tax

$726 million (2018: $642 million)

Group materiality

$25 million (2018: $27 million)



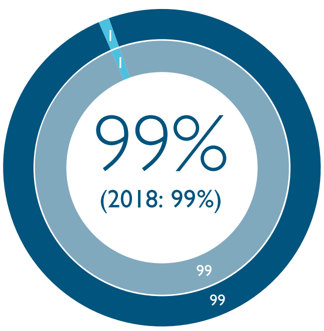
$25 million
Whole financial statements materiality
(2018: $27 million)

$20 million
Range of materiality at 14 components
($0.5 million - $20 million)
(2018: $0.45 million - $24 million)

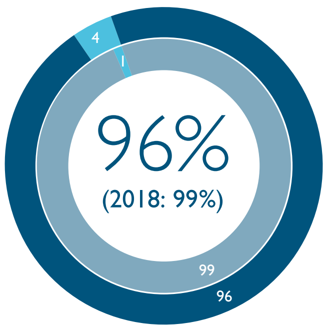
$1.25 million
Misstatements reported to
the audit committee (2018: $1.3 million)

Group profit before tax
Group materiality

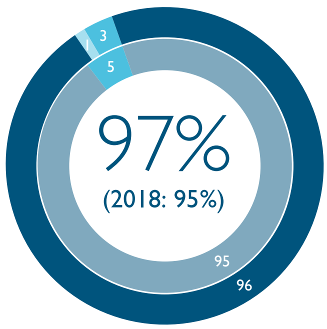
Group revenue



Group profit before tax



Group total assets



Full scope for group audit purposes 2019
Specified audit procedures scope 2019
Full scope for group audit purposes 2018
Residual components for 2019 and 2018

4. We have nothing to report on going concern

The Directors have prepared the financial statements on the going concern basis as they do not intend to liquidate the Company or the Group or to cease their operations, and as they have concluded that the Company's and the Group's financial position means that this is realistic. They have also concluded that there are no material uncertainties that could have cast significant doubt over their ability to continue as a going concern for at least a year from the date of approval of the financial statements ("the going concern period").

Our responsibility is to conclude on the appropriateness of the Directors' conclusions and, had there been a material uncertainty related to going concern, to make reference to that in this audit report. However, as we cannot predict all future events or conditions and as subsequent events, including Brexit and Covid-19 coronavirus, may result in outcomes that are inconsistent with judgements that were reasonable at the time they were made, the absence of reference to a material uncertainty in this auditor's report is not a guarantee that the Group and the Company will continue in operation.

We identified the disclosures relating to going concern as a key audit matter (see section 2 of this report). Based on the work described in our response to that key audit matter, we are required to report to you if:

- we have anything material to add or draw attention to in relation to the Directors' statement in Note 2(a) to the financial statements on the use of the going concern basis of accounting with no material uncertainties that may cast significant doubt over the Group and Company's use of that basis for a period of at least twelve months from the date of approval of the financial statements; or
- the related statement under the Listing Rules set out on page 118 is materially inconsistent with our audit knowledge.

We have nothing to report in these respects.

5. We have nothing to report on the other information in the Annual Report

The Directors are responsible for the other information presented in the Annual Report together with the financial statements. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except as explicitly stated below, any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work we have not identified material misstatements in the other information.

Strategic report and Directors' report

Based solely on our work on the other information:

- we have not identified material misstatements in the strategic report and the Directors' report;
- in our opinion the information given in those reports for the financial year is consistent with the financial statements; and
- in our opinion those reports have been prepared in accordance with the Companies Act 2006.

Directors' Remuneration Report

In our opinion the part of the Directors' Remuneration Report to be audited has been properly prepared in accordance with the Companies Act 2006.

Disclosures of principal risks and longer-term viability

Based on the knowledge we acquired during our financial statements audit, we have nothing material to add or draw attention to in relation to:

- the Directors' confirmation within the Strategic report on page 66 that they have carried out a robust assessment of the Principal Risks facing the Group, including those that would threaten its business model, future performance, solvency and liquidity;
- the Principal Risks disclosures describing these risks and explaining how they are being managed and mitigated; and
- the Directors' explanation in the Directors' viability statement of how they have assessed the prospects of the Group, over what period they have done so and why they considered that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Under the Listing Rules we are required to review the Directors' viability statement. We have nothing to report in this respect.

Our work is limited to assessing these matters in the context of only the knowledge acquired during our financial statements audit. As we cannot predict all future events or conditions and as subsequent events may result in outcomes that are inconsistent with judgments that were reasonable at the time they were made, the absence of anything to report on these statements is not a guarantee as to the Group's and Company's longer-term viability.

Corporate governance disclosures

We are required to report to you if:

- we have identified material inconsistencies between the knowledge we acquired during our financial statements audit and the Directors' statement that they consider that the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy; or
- the section of the annual report describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee.

We are required to report to you if the Corporate Governance Statement does not properly disclose a departure from the provisions of the UK Corporate Governance Code specified by the Listing Rules for our review.

We have nothing to report in these respects.

6. We have nothing to report on the other matters on which we are required to report by exception

Under the Companies Act 2006, we are required to report to you if, in our opinion:

- adequate accounting records have not been kept by the parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- the parent Company financial statements and the part of the Directors' Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.
- We have nothing to report in these respects.

7. Respective responsibilities

Directors' responsibilities

As explained more fully in their statement set out on page 119, the Directors are responsible for: the preparation of the financial statements including being satisfied that they give a true and fair view; such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the Group and parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless they either intend to liquidate the Group or the parent Company or to cease operations, or have no realistic alternative but to do so.

Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or other irregularities (see below), or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud, other irregularities or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities.

Irregularities – ability to detect

We identified areas of laws and regulations that could reasonably be expected to have a material effect on the financial statements from our general commercial and sector experience, through discussion with the Directors and other management (as required by auditing standards), and discussed with the Directors and other management the policies and procedures regarding compliance with laws and regulations. We communicated identified laws and regulations throughout our team and remained alert to any indications of non-compliance throughout the audit. This included communication from the group to component audit teams of relevant laws and regulations identified at group level.

The potential effect of these laws and regulations on the financial statements varies considerably.

Firstly, the Group is subject to laws and regulations that directly affect the financial statements including financial reporting legislation (including related companies legislation), distributable profits legislation and taxation legislation. We assessed the extent of compliance with these laws and regulations as part of our procedures on the related financial statement items.

Secondly, the Group is subject to many other laws and regulations where the consequences of non-compliance could have a material effect on amounts or disclosures in the financial statements, for instance through the imposition of fines or litigation or the loss of the Group's licence to operate. We identified the following areas as those most likely to have such an effect: health and safety, anti-bribery and corruption, employment law and Kazakhstan, Kyrgyzstan and Russia mining regulations, recognising the nature of the Group's activities. Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of the Directors and other management and inspection of regulatory and legal correspondence, if any. These limited procedures did not identify actual or suspected non-compliance. Further detail in respect of bribery and corruption is set out in the key audit matter disclosures in section 2 of this report.

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the financial statements, even though we have properly planned and performed our audit in accordance with auditing standards. For example, the further removed non-compliance with laws and regulations (irregularities) is from the events and transactions reflected in the financial statements, the less likely the inherently limited procedures required by auditing standards would identify it. In addition, as with any audit, there remained a higher risk of non-detection of irregularities, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. We are not responsible for preventing non-compliance and cannot be expected to detect non-compliance with all laws and regulations.

8. The purpose of our audit work and to whom we owe our responsibilities

This report is made solely to the Company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and the terms of our engagement by the Company. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report, and the further matters we are required to state to them in accordance with the terms agreed with the Company, and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members, as a body, for our audit work, for this report, or for the opinions we have formed.

Juliette Lowes (Senior Statutory Auditor) for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
15 Canada Square,
London, E14 5GL
19 February 2020

$ million (unless otherwise stated)	Notes	2019	2018
Revenues	4(b)	**2,266**	2,162
Cost of sales	6(a)	**(1,124)**	(1,077)
Gross profit		**1,142**	1,085
Selling and distribution expenses	6(b)	**(91)**	(94)
Administrative expenses	6(c)	**(132)**	(115)
Net other operating income		**9**	4
Impairment losses	7	**(5)**	(29)
Operating profit		**923**	851
Analysed as:			
Operating profit (excluding special items)		**923**	871
Special items	8	**–**	(20)
Finance income		**18**	33
Finance costs	12	**(195)**	(245)
Net foreign exchange (loss)/gain		**(20)**	3
Profit before tax		**726**	642
Income tax expense	13(a)	**(155)**	(132)
Profit for the year		**571**	510
Analysed as:			
Underlying Profit	14	**571**	530
Special items	8	**–**	(20)
Attributable to:			
Equity holders of the Company	14	**571**	510
Non-controlling interests	25	**–**	–
		571	510
Other comprehensive income/(expense) for the year after tax:			
Items that may be reclassified subsequently to the income statement:			
Exchange differences on retranslation of foreign operations		**64**	(427)
Items that will never be reclassified to the income statement:			
Actuarial losses on employee benefits, net of tax	27	**(1)**	–
Other comprehensive income/(expense) for the year		**63**	(427)
Total comprehensive income for the year		**634**	83
Attributable to:			
Equity holders of the Company		**635**	82
Non-controlling interests		**(1)**	1
		634	83
Earnings per share attributable to equity holders of the Company			
Ordinary EPS – basic ($)	14	**1.21**	1.14
Ordinary EPS – diluted ($)	14	**1.17**	1.14
EPS based on Underlying Profit – basic ($)	14	**1.21**	1.18
EPS based on Underlying Profit – diluted ($)	14	**1.17**	1.18

CONSOLIDATED BALANCE SHEET
At 31 December 2019

$ million	Notes	2019	2018
Assets			
Non-current assets			
Intangible assets		**5**	6
Property, plant and equipment	16	**2,756**	2,130
Mining assets	17	**1,457**	432
Other non-current assets	18	**338**	301
Deferred tax asset	13(b)	**40**	28
		4,596	2,897
Current assets			
Inventories	19	**553**	439
Prepayments and other current assets	20	**193**	90
Income taxes prepaid		**7**	18
Trade and other receivables	21	**176**	127
Current investments	22	**–**	250
Cash and cash equivalents	23	**541**	1,219
		1,470	2,143
Total assets		**6,066**	5,040
Equity and liabilities			
Equity			
Share capital	24(a)	**177**	171
Share premium	5(a)	**2,883**	2,650
Capital reserves	24(c)	**(2,158)**	(2,457)
Retained earnings		**1,213**	686
Attributable to equity holders of the Company		**2,115**	1,050
Non-controlling interests	25	**59**	4
Total equity		**2,174**	1,054
Non-current liabilities			
Borrowings	26	**2,755**	2,914
Deferred tax liability	13(b)	**110**	76
Employee benefits	27	**15**	12
Provision for closure and site restoration	28	**74**	58
Other non-current liabilities	29	**12**	7
		2,966	3,067
Current liabilities			
Trade and other payables	30	**360**	320
Borrowings	26	**545**	539
Income taxes payable		**16**	11
Employee benefits	27	**2**	2
Provision for closure and site restoration	28	**–**	1
Other current liabilities	29	**3**	46
		926	919
Total liabilities		**3,892**	3,986
Total equity and liabilities		**6,066**	5,040

These financial statements were approved by the Board of Directors on 19 February 2020.

Signed on behalf of the Board of Directors

Andrew Southam
Chief Executive Officer

John Hadfield
Chief Financial Officer

$ million	Notes	2019	Restated[1] 2018
Operating activities			
Cash receipts from customers		2,181	2,198
Net proceeds from historical VAT related to construction		–	3
Cash payments to employees, suppliers and taxes other than income tax		(1,347)	(1,204)
Cash flows from operations before interest and income taxes paid	31	834	997
Interest paid		(230)	(229)
Income taxes paid		(92)	(95)
Net cash flows from operating activities		512	673
Investing activities			
Interest received		20	32
Acquisition of Baimskaya copper project, net of cash acquired	5(a)	(435)	–
Purchase of intangible assets		(1)	(2)
Purchase of property, plant and equipment		(737)	(567)
Investments in mining assets		(122)	(46)
Net redemption of/(additions to) current investments	22	250	(250)
Other investing activities		(2)	(18)
Net cash flows used in investing activities		(1,027)	(851)
Financing activities			
Proceeds from borrowings	32	387	–
Repayment of borrowings	32	(545)	(424)
Dividends paid by the Company	15(a)	(47)	(27)
Advance consideration for investment in Koksay	5(b)	45	25
Other financing activities		(1)	–
Net cash flows used in financing activities		(161)	(426)
Net decrease in cash and cash equivalents	32	(676)	(604)
Cash and cash equivalents at the beginning of the year		1,219	1,821
Effect of exchange rate changes on cash and cash equivalents	32	(2)	2
Cash and cash equivalents at the end of the year	23	541	1,219

1 Advance consideration for investment in Koksay reclassified from investing activities, see note 2(g).

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Year ended 31 December 2019

		Attributable to equity holders of the Company						
$ million	Notes	Share capital	Share premium	Capital reserves[1]	Retained earnings	Total	Non-controlling interests	Total equity
At 1 January 2018		171	2,650	(2,029)	203	995	3	998
Profit for the year		–	–	–	510	510	–	510
Exchange differences on retranslation of foreign operations		–	–	(428)	–	(428)	1	(427)
Total comprehensive income/(expense) for the year		–	–	(428)	510	82	1	83
Dividends	15(a)	–	–	–	(27)	(27)	–	(27)
At 31 December 2018		171	2,650	(2,457)	686	1,050	4	1,054
Profit for the year		–	–	–	571	571	–	571
Exchange differences on retranslation of foreign operations		–	–	65	–	65	(1)	64
Actuarial loss on employee benefits, net of tax	27	–	–	–	(1)	(1)	–	(1)
Total comprehensive income/(expense) for the year		–	–	65	570	635	(1)	634
Dividends	15(a)	–	–	–	(47)	(47)	(3)	(50)
Shares issued and Deferred Consideration arising from acquisition of the Baimskaya copper project	5(a)	6	233	225	–	464	–	464
Part disposal of subsidiary	5(b)	–	–	9	2	11	59	70
Share-based payments, net of taxes		–	–	–	2	2	–	2
At 31 December 2019		177	2,883	(2,158)	1,213	2,115	59	2,174

1 See note 24(c) for an analysis of 'Capital reserves'.

1. Corporate information

KAZ Minerals PLC (the 'Company') is a public limited company incorporated in England and Wales. The Company's registered office is 6th Floor, Cardinal Place, 100 Victoria Street, London SW1E 5JL, United Kingdom. The Group comprises the Company and its consolidated divisions as set out below.

The Group operates in the natural resources industry through five divisions, the principal activities of which during 2019 were:

Operating division	Principal activity	Primary countries of operations
Aktogay	Mining and processing of copper and other metals	Kazakhstan
Bozshakol	Mining and processing of copper and other metals	Kazakhstan
East Region[1]	Mining and processing of copper and other metals	Kazakhstan
Bozymchak[1]	Mining and processing of copper and other metals	Kyrgyzstan
Mining Projects	Development of greenfield metal deposits	Kazakhstan and Russia

1 East Region and Bozymchak are separate divisions but have been combined for segmental reporting purposes.

The legal names of the constituent companies within the above divisions are shown in note 39(i).

2. Basis of preparation

The financial statements set out on pages 128 to 180 have been prepared using accounting policies consistent with IFRSs as adopted by the EU.

(a) Going concern

The Group manages liquidity risk by maintaining adequate committed borrowing facilities and working capital funds. The Board monitors the net debt level and liquidity position of the Group taking into consideration the expected outlook of the Group's financial position, cash flows, future capital expenditure and debt service requirements.

At 31 December 2019, the Group's net debt was $2,759 million with gross debt of $3,300 million, gross liquid funds of $541 million and undrawn committed facilities of $306 million. The gross debt facilities consist of:

- $1,165 million of the CDB-Bozshakol and Bozymchak facilities, which amortise over the period to 2025;
- $1,214 million of the CDB-Aktogay US dollar and Chinese yuan facilities, which amortise over the period to 2029;
- $300 million of the PXF facility, which amortises over the period to June 2021;
- $234 million of the DBK-Aktogay I facility, which amortises over the period to June 2025;
- $315 million of the DBK-Aktogay II facility, which amortises over the period from November 2022 to 2034. The remaining $280 million of the committed facility is expected to be drawn by the end of 2020; and
- $72 million of the CAT facility, which amortises over the period to 2024. The remaining $26 million of the committed facility is expected to be drawn by the end of the first quarter of 2021.

On 28 January 2020, the Group announced that it had completed an amendment and extension of its PXF facility which includes an increase in facility commitments to $1.0 billion. The maturity profile was amended such that the facility will amortise over the period from January 2021 to December 2024, or to December 2026 if two annual extension options are exercised.

The Board has considered the Group's cash flow forecasts for the period to 31 March 2021, including the outlook for commodity prices, production levels from the Group's operations, its future capital requirements including the finalisation of the Aktogay expansion project and initial study and pioneer works at the Baimskaya copper project, and the principal repayments due under the Group's debt facilities.

The Board is satisfied that the Group's forecasts, taking into account reasonably possible downside scenarios, show that the Group has adequate liquidity to continue in operational existence for the foreseeable future. Accordingly, it is appropriate to adopt the going concern basis of accounting in the preparation of these consolidated financial statements.

(b) Basis of accounting

The consolidated financial statements have been prepared on a historical cost basis, except for metal-related trade receivables and derivative financial instruments which have been measured at fair value. The consolidated financial statements are presented in US dollars ('$') and all financial information has been rounded to the nearest million dollars ('$ million'), except where otherwise indicated.

(c) Basis of consolidation

The consolidated financial statements set out the Group's financial position as at 31 December 2019 and the Group's financial performance for the year ended 31 December 2019.

Subsidiaries are those enterprises controlled by the Group. Control exists when the Group has the power, directly or indirectly, to direct those activities of an enterprise that most significantly affect the returns the Group earns from its involvement with the enterprise. Subsidiaries are consolidated from the date on which control is transferred to the Group and cease to be consolidated from the date on which control is transferred out of the Group. When the Group ceases to have control, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in the income statement. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This treatment may mean that amounts previously recognised in other comprehensive income are recycled through the income statement. Joint operations are those arrangements jointly controlled by the Group and one or more parties with rights to the assets and obligations for the liabilities relating to the arrangement, as outlined in note 38(b). Joint operations are proportionally consolidated from the date on which the Group obtains joint control and cease to be proportionally consolidated from the date on which the Group no longer has joint control.

The financial statements of subsidiaries and joint operations are prepared for the same reporting year as the Company, using consistent accounting policies. All intercompany balances and transactions, including unrealised profits arising from intragroup transactions, are eliminated in full. Unrealised losses are eliminated in the same way as unrealised gains except that they are only eliminated to the extent that there is no evidence of impairment.

See note 39(i) for a list of all the Company's subsidiaries and joint operations.

(d) Statement of compliance

The consolidated financial statements of the Company, its subsidiaries and joint operations have been prepared in accordance with IFRSs as issued by the IASB and interpretations issued by the IFRIC, as adopted by the EU and in accordance with the provisions of the Companies Act 2006.

(e) Adoption of new standards and interpretations

The following accounting standards, amendments and interpretations, which had no significant impact on these financial statements, became effective in the current reporting period on adoption by the EU through the European Financial Reporting Advisory Group ('EFRAG'):

- IFRS 16 '*Leases*' was adopted on 1 January 2019, replacing IAS 17 *'Leases'*. The new standard has been applied using the 'modified retrospective approach', which did not result in a classification or measurement adjustment to retained earnings on transition or a restatement of comparative information, and there was no impact on opening equity at 1 January 2019. The standard changes the identification of leases and how they will be recognised, measured and disclosed by lessees, requiring the recognition of a right-of-use asset and liability for the future lease payments on the balance sheet. The standard requires the right-of-use asset to be depreciated over the duration of the lease term and shown within operating profit in the income statement, with the interest cost associated with the financing of the asset included within interest expense. In applying the transition requirements and provisions of the new standard, the Group reviewed its lease contracts, which mainly related to leased office buildings and payments for land, and the right-of-use asset and related liability was found to be immaterial. The standard does not apply to leases to explore for or use natural resources, such as mining licences and rights.

  The Group has elected not to recognise right-of-use assets and lease liabilities for leases which have low value, or short-term leases with a duration of 12 months or less. The payments associated with such leases are charged directly to the income statement on a straight-line basis over the lease term.

  In assessing the application of IFRS 16, the Group considered the following practical expedients:

  - the previous determination of whether a contract is, or contains, a lease pursuant to IAS 17 *'Leases'* and IFRIC 4 *'Determining whether an Arrangement Contains a Lease'* has been maintained for existing contracts;
  - right-of-use assets or lease liabilities for leases where the lease term ends within 12 months of the date of initial application have not been recognised;
  - initial direct costs from right-of-use assets have been excluded; and
  - hindsight was used when assessing the lease term.
- *'Borrowing Costs Eligible for Capitalisation (Amendments to IAS 23)'* was adopted on 1 January 2019. The amendment requires that project specific borrowings are included as general borrowings once those assets are operating as intended and therefore the associated interest will become available for capitalisation on other 'qualifying assets', being assets that necessarily take a substantial period of time to get ready for their intended use or sale. In the year ended 31 December 2019, this amendment brought the CDB-Bozshakol and Bozymchak, the CDB-Aktogay, and the first DBK-Aktogay loan borrowed specifically for the construction of the respective capital projects into general borrowings. The interest on these loans is therefore included in the capitalisation rate applied to expenditures on qualifying capital projects, such as the expansion of Aktogay (see note 12).
- IFRIC 23 '*Uncertainty over Income Tax Treatments*' was adopted on 1 January 2019. The interpretation clarifies that income tax and deferred tax assets and liabilities should be measured reflecting the uncertainty of any positions adopted under IAS 12 *'Income Taxes'*, where acceptance of such position by the tax authorities is considered as less than probable. The application of this interpretation had no material impact on the amounts reported in the Group's consolidated financial statements.
- The application of a number of minor amendments, including those from the 2015-2017 annual improvement cycle which became effective on 1 January 2019, had no impact on the Group's consolidated financial statements due to the nature of its operations. This includes *'Previously Held Interests in a Joint Operation (Amendments to IFRS 3 and IFRS 11)'*, *'Income Tax Consequences of Payments on Instruments Classified as Equity (Amendments to IAS 12)'*, *'Prepayment Features with Negative Compensation (Amendments to IFRS 9)'*, *'Long-term Interests in Associates and Joint Ventures (Amendments to IAS 28)'*, and *'Plan Amendment, Curtailment or Settlement (Amendments to IAS 19)'*.

2. Basis of preparation continued

(f) New standards and interpretations not yet adopted

The key new standards, interpretations and amendments, as issued by the IASB, are expected to be adopted by the Group once they are effective for application in the EU:

- *'Definition of a Business (Amendments to IFRS 3)'*: the IASB effective date is 1 January 2020 and the amendment is yet to be endorsed by the EU. The amendment provides clearer application guidance to help companies distinguish between a business and a group of assets when applying IFRS 3 *'Business Combinations'*. The amendment also clarifies that applying the classification of a business would not be appropriate if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. This amendment is not expected to have an impact on the Group as it would not change the accounting for the Baimskaya copper project.
- *'Definition of Material (Amendments to IAS 1 and IAS 8)'*: the IASB effective date is 1 January 2020 and the amendment has been endorsed by the EU. The amendment revises the definition of material stating that 'information is material if omitting, misstating or obscuring it could reasonably be expected to influence the decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity'. This amendment is not expected to have an impact on the Group's consolidated financial statements.
- *'Interest Rate Benchmark Reform (Amendments to IFRS 9, IAS 39 and IFRS 7)'*: the IASB effective date is 1 January 2020 and the amendment has been endorsed by the EU. The amendment requires that for interest rate hedges affected by Interbank Offered Rate ('IBOR') reform, the interest rate benchmark is not altered when considering whether a forecast transaction is highly probable, or whether there is an economic relationship between the hedged cash flow and the hedging instrument. This would apply for a limited period until there is no longer uncertainty relating to IBOR reform. This amendment is not expected to have an impact on the Group's consolidated financial statements.
- *IFRS 17 'Insurance Contracts'*: the IASB effective date is 1 January 2021 and the standard is yet to be endorsed by the EU. IFRS 17 will replace IFRS 4 *'Insurance Contracts'* and applies to all types of insurance contracts as well as to certain guarantees and financial instruments with discretionary participation features. This standard is not expected to have an impact on the Group's consolidated financial statements due to the nature of its operations.
- There are a number of other amendments which have not yet been endorsed by the EU and are not expected to have a material impact on the Group's consolidated financial statements.

The Group has not early adopted any new standards or interpretations.

(g) Comparative information

Where a change in the presentation format of the consolidated financial statements has been made during the year, comparative figures have been restated accordingly.

In the consolidated statement of cash flows, the advance consideration arising on the part disposal of Koksay of $25 million in 2018 has been reclassified to financing activities (previously shown within investing activities), being proceeds from changes in ownership interests in subsidiaries that do not result in loss of control. This restatement increased cash flows from financing activities and decreased cash flows from investing activities for the comparative period by $25 million, and is solely for presentation purposes.

3. Significant accounting judgements and key sources of estimation uncertainty

In the course of preparing these financial statements, the Directors make necessary judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources.

Judgements are based on the Directors' best knowledge of the relevant facts and circumstances having regard to prior experience, but actual results may differ from the amounts included in the consolidated financial statements.

Estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant, but actual results may differ from these estimates. The estimates and underlying assumptions applied are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the critical judgements, key assumptions and sources of estimation uncertainty concerning the future that arise mainly from the nature of the Group's mining operations and which the Directors believe are likely to have the greatest effect on the amounts recognised in the consolidated financial statements. However, the Directors do not expect a significant risk of a material change to the Group's carrying value of the assets and liabilities affected by these factors in the next 12 months, within a reasonably possible range, with the exception of Bozymchak, as discussed below.

The qualitative disclosures regarding these sources of estimation uncertainty are presented because the Directors consider these to be relevant to the mining industry and useful in understanding the financial statements of the Group. These disclosures go beyond the minimum requirements of IAS 1 '*Presentation of Financial Statements*' which only requires disclosure of estimation uncertainty where changes in estimates, within a reasonably possible range, could have a significant risk of a material effect within the next 12 months on the amounts recognised in the financial statements.

Impairment of assets

Significant accounting judgements

The Directors review the carrying value of the Group's assets to determine whether there are any indicators of impairment such that the carrying values of the assets may not be recoverable. The assessment of whether an indicator of impairment or reversal thereof has arisen requires considerable judgement, taking account of factors such as future operational and financial plans, commodity prices and the competitive environment.

For exploration and evaluation assets held by the Group, namely Koksay and Baimskaya, before the technical feasibility and commercial viability of extracting a mineral resource is demonstrable, indicators of impairment can include: (a) the right to explore in a specific area has expired and is not expected to be renewed; (b) significant expenditure for further exploration or evaluation activities is not being planned; (c) exploration and evaluation of mineral resources have not led to the discovery or confirmation of commercially viable resource; or (d) that sufficient data exists to indicate that the carrying amount of the asset may not be recovered in full from development or sale.

Where such indicators exist, the carrying value of the assets of a cash generating unit ('CGU') or exploration and evaluation asset is compared with the recoverable amount of those assets, that is, the higher of its fair value less costs to sell and value in use, which is typically determined on the basis of discounted future cash flows. For the purpose of assessing commodity prices as potential indicators of impairment, consideration was given to a range of equity analyst long-term copper prices with a median price of around $6,700/t.

An assessment of the key external and internal factors affecting the Group, its CGUs or exploration and evaluation assets at 31 December 2019 did not identify any indicators of impairment or reversal thereof at any of the Group's CGUs or exploration and evaluation assets.

In 2018, adverse court rulings in Kyrgyzstan were received for the recovery of historical VAT incurred on the construction of the Bozymchak plant, amounting to $16 million and previously included within non-current assets. This was considered to be an impairment indicator at the Bozymchak CGU and an impairment review was undertaken in the comparative period (see note 7).

Key sources of estimation uncertainty

The preparation of discounted future cash flows used to assess the recoverable amount of the Group's CGUs includes management estimates of commodity prices, future operating costs, economic and regulatory environments, capital expenditure requirements, long-term mine plans and other factors including the discount rate. Any subsequent revisions to cash flows due to changes in the factors listed above, principally commodity prices, beyond what is considered as reasonably possible, could impact the recoverable amount of the assets. Changes to commodity prices within a reasonably possible range are not expected to significantly impact the carrying value of the Group's Kazakhstan based CGUs. In respect of the Group's Bozymchak CGU in Kyrgyzstan, which was previously impaired, a 5% reduction in the forecast copper prices could result in the carrying value exceeding its recoverable amount by around $10 million. This is a simple sensitivity on copper prices in isolation and does not consider any actions which management would take to mitigate the impact of a fall in commodity prices. Additionally, a 1% increase in the discount rate could result in an impairment of around $5 million.

3. Significant accounting judgements and key sources of estimation uncertainty continued

Non-current inventories

Significant accounting judgements

Mining activities may result in the stockpiling of ore. Ore which is not expected to be processed within 12 months of the balance sheet date and is considered to fall outside of the normal operating cycle of the operation is classified as a non-current asset. The classification of stockpiled ore between non-current and current assets is based on judgements as to the expected timing of processing and on future production plans.

Key sources of estimation uncertainty

Stockpiled ore is reported at the lower of cost or net realisable value, with net realisable value subject to estimates of further processing, delivery costs and future commodity prices. Commodity prices applied in assessing the net realisable value fall within the range of equity analyst commodity price expectations. Changes to commodity prices in the next 12 months within a reasonably possible range are not expected to significantly impact the carrying value of non-current inventories.

Determination of mineral reserves and useful lives of property, plant and equipment

Key sources of estimation uncertainty

Mineral reserves are estimates of the amount of product that can be economically and legally extracted from the Group's mining properties. In order to estimate reserves, assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, transport costs, commodity demand, commodity prices and exchange rates. The Group estimates its mineral reserves and mineral resources based on information compiled and reviewed by competent persons as defined in accordance with KAZRC/JORC.

In assessing the life of a mine for accounting purposes, mineral reserves are taken into account where there is a high degree of confidence of economic extraction. Since the economic assumptions used to estimate reserves change from period to period, and as additional geological data is generated during the course of operations, estimates of reserves may change from period to period. Changes in reported reserves may affect the Group's financial results and financial position in a number of ways, including the following:

- asset recoverable amounts may be affected due to changes in estimated future cash flows;
- deferral of stripping costs which are determined using a waste to ore stripping ratio;
- depreciation, depletion and amortisation charged in the income statement may change where such charges are determined by the unit of production basis, or where the useful economic lives of assets change;
- decommissioning, site restoration and environmental provisions may change where changes in estimated reserves affect expectations about the timing or cost of these activities; and
- the carrying value of deferred tax assets may change due to revisions in estimates of the likely recovery of tax benefits.

There are numerous uncertainties inherent in estimating mineral reserves and assumptions that are valid at the time of estimation which may change significantly when new information becomes available. Changes in the forecast prices of commodities, exchange rates, production costs or recovery rates may change the economic status of reserves and may ultimately result in reserves being revised. The Directors do not expect significant changes in the carrying value of the Group's mining properties; property, plant and equipment; closure liabilities and deferred taxes to arise from changes in mineral reserve estimates within a reasonably possible range in the next 12 months. Revisions to mineral reserve estimates in 2019 did not result in a material change to the carrying value of these assets and liabilities.

For property, plant and equipment depreciated on a straight-line basis over its useful economic life, the appropriateness of the asset's useful economic life is reviewed at least annually and changes could affect prospective depreciation rates and asset carrying values.

Decommissioning and site restoration costs

Significant accounting judgements

The Directors use judgement and experience in determining the expected timing, closure and decommissioning methods, which can vary in response to changes in the relevant legal requirements or decommissioning technologies.

Key sources of estimation uncertainty

The ultimate cost of decommissioning and rehabilitation is uncertain and cost estimates can vary in response to many factors including the emergence of new restoration techniques and costs of materials and labour. Therefore, the Group periodically reviews the closure cost estimate at each operation. The expected timing and extent of expenditure can also change in response to revisions in mineral reserve estimates, processing levels and commodity prices whilst future costs are discounted using forecast discount rates. Due to the relatively long life of the Group's most significant assets, changes in estimates within a reasonably possible range in the next 12 months are not expected to significantly impact the carrying value of the Group's provisions for decommissioning and site restoration costs.

Taxes

Significant accounting judgements

The Directors make judgements in relation to the recognition of various taxes levied on the Group, which are both payable and recoverable. Judgement applies particularly to corporate income taxes, transfer pricing, VAT and outcomes of any tax disputes which would affect the recognition of tax liabilities and deferred tax assets. Judgement over recognition also applies to taxes which are recoverable by the Group, principally VAT paid, for which the recoverability and timing of recovery is assessed. In making judgements related to taxes, the Directors believe that the tax positions it adopts are in line with the applicable legislation and reflect the probable outcome. The tax obligations and receivables, upon audit by the tax authorities at a future date, may differ as a result of differing interpretations. These interpretations may impact the expected timing and quantum of taxes payable and recoverable and are discussed further in note 34.

Key sources of estimation uncertainty

Estimates may be made to determine the amount of taxes recoverable, principally VAT and deferred tax assets. The recognition of deferred tax assets mainly relates to tax losses which may be utilised in the future, giving consideration to future profitability, estimates of commodity prices, interest rate and operating costs and any statute of limitation period. Changes in these estimates within a reasonably possible range in the next 12 months are not expected to significantly alter the carrying value of the Group's taxes that are recoverable.

Joint operations

Significant accounting judgements

Joint arrangements are classified as joint operations where the Group exercises joint control and the parties have the rights to the assets and obligations for the liabilities relating to the arrangement, as outlined in note 38(b). Judgement is required in determining the nature of the joint arrangement based on the particular facts and circumstances, the legal form and purpose of the joint arrangement. Industrial Construction Group LLC ('ICG') is a joint arrangement established to undertake the engineering and construction of the additional sulphide processing facility at Aktogay. The Group holds 49% of voting rights in ICG but exercises joint control as decisions require unanimous consent. As the output of the joint arrangement is the construction of the additional processing facilities at Aktogay and thus benefits the Group, ICG is accounted for as a joint operation and is therefore proportionally consolidated. Further details of the accounting policy for joint operations is outlined in note 38(b).

Acquisition of the Baimskaya copper project

Significant accounting judgements

In assessing the accounting for the acquisition of Baimskaya, consideration was given to whether the copper project consisted of an integrated set of inputs and processes (as defined under IFRS 3 '*Business Combinations*') that could be used to generate an output. As the copper project is in the exploration stage prior to feasibility, the work undertaken to date was considered to be an assessment of its inputs rather than the existence of inputs and processes capable of generating an output. As such, the acquisition was judged to be an asset and not a business as defined under IFRS 3, with the majority of the value paid being shown as a mining licence within mining assets (see note 5(a)).

4. Segment information

Information provided to the Group's Board of Directors for the purposes of resource allocation and the assessment of segmental performance is prepared in accordance with the management and operational structure of the Group. For management and operational purposes, the Group is organised into a number of businesses as shown below, according to the nature of their operations, end-products and services rendered. Each of these business units represents an operating segment in accordance with IFRS 8 '*Operating Segments*'. The East Region and Bozymchak segments are presented on a combined basis.

The Group's operating segments are:

Aktogay

The Aktogay open pit, sulphide concentrator and oxide plant located in the east of Kazakhstan and the associated international sales and marketing activities managed out of the UK. The sulphide concentrator was commissioned in the final quarter of 2016 with some concentrate toll processed at the Balkhash smelter (a related party) and the cathode output sold to third parties. The smaller oxide plant was commissioned in the fourth quarter of 2015 and produces copper cathode. The oxide plant is included in the Aktogay operating segment due to the sharing of infrastructure, its relatively small size and to reflect the Group's management structure. An expansion of the sulphide processing facilities at Aktogay was announced in December 2017, which is expected to double its sulphide ore processing capacity by the end of 2021.

Bozshakol

The Bozshakol open pit, sulphide concentrator and clay plant located in the Pavlodar region of Kazakhstan and the associated international sales and marketing activities managed out of the UK. The sulphide and clay concentrators were commissioned in February 2016 and in the fourth quarter of 2016 respectively. Some concentrate from both plants is also toll processed at the Balkhash smelter with the output of copper, gold and silver sold to third parties. The clay plant is included in the Bozshakol operating segment due to the sharing of infrastructure and mining pit, its relatively small size and to reflect the Group's management structure.

East Region and Bozymchak

The East Region and Bozymchak operations are shown as one operating segment consisting of Vostoktsvetmet LLC ('East Region'), whose principal activity is the mining and processing of copper and other metals which are produced as by-products from three underground mines and the associated concentrators located in the eastern region of Kazakhstan; and KAZ Minerals Bozymchak LLC ('Bozymchak') a copper-gold open pit mine and concentrator located in western Kyrgyzstan and the associated international sales and marketing activities managed out of the UK. Bozymchak is combined with the East Region operations, given the similarity of their economic characteristics and concentrate production processes; and as their combined output is toll processed at the Balkhash smelter and subsequently sold to the Group's customers.

Mining Projects

The Group's mining projects consist of companies which are responsible for the assessment and development of greenfield metal deposits. The segment includes the Koksay deposit in Kazakhstan and the Baimskaya licence area in the Chukotka region of Russia. Both of these projects are at the feasibility study stage.

Managing and measuring operating segments

The key performance measure which the Directors use internally to assess the performance of the operating segments is EBITDA. Refer to the APMs section on page 184 for further details.

The Treasury department manages the Group's borrowings and monitors finance income and finance costs at the Group level on a net basis, rather than by operating segment.

Segmental information is also provided in respect of revenues, by destination and by product. Segmental information relating to employees is provided in note 9.

(a) Operating segments

(i) Income statement information

$ million	Aktogay	Bozshakol	East Region and Bozymchak	Mining Projects	Corporate Services	Total
						Year ended 31 December 2019
Revenues	863	851	552	–	–	2,266
EBITDA	564	585	230	(4)	(20)	1,355
Less: depreciation, depletion and amortisation[1]	(104)	(90)	(41)	–	(1)	(236)
Less: MET and royalties[1,2]	(79)	(68)	(49)	–	–	(196)
Operating profit/(loss)	381	427	140	(4)	(21)	923
Net finance costs and foreign exchange loss						(197)
Income tax expense						(155)
Profit for the year						571

$ million	Aktogay	Bozshakol	East Region and Bozymchak	Corporate Services	Total
					Year ended 31 December 2018
Revenues	775	756	631	–	2,162
EBITDA	530	520	284	(24)	1,310
Special items – note 8	–	–	(20)	–	(20)
EBITDA (after special items)	530	520	264	(24)	1,290
Less: depreciation, depletion and amortisation[1]	(108)	(90)	(40)	(1)	(239)
Less: MET and royalties[1,2]	(72)	(69)	(59)	–	(200)
Operating profit/(loss)	350	361	165	(25)	851
Net finance costs and foreign exchange gain					(209)
Income tax expense					(132)
Profit for the year					510

1 Depreciation, depletion and amortisation and MET and royalties exclude the costs associated with inventories on the balance sheet.

2 MET and royalties have been excluded from the key financial indicator of EBITDA. The Directors believe that MET and royalties are a substitute for a tax on profits, hence their exclusion provides an informed measure of the operational performance of the Group.

4. Segment information continued

(a) Operating segments continued

(ii) Balance sheet information

$ million	Aktogay	Bozshakol	East Region and Bozymchak	Mining Projects: Baimskaya	Mining Projects: Koksay	Corporate Services[4]	Total
							At 31 December 2019
Assets							
Non-current assets[1]	1,758	1,112	398	1,044	243	6,220	10,775
Current assets excluding cash and cash equivalents[2]	414	325	173	19	–	1,928	2,859
Cash and cash equivalents	6	6	16	1	64	448	541
Segment assets	2,178	1,443	587	1,064	307	8,596	14,175
Taxes receivable							47
Elimination							(8,156)
Total assets							6,066
Liabilities							
Non-current liabilities	18	12	64	5	3	2	104
Inter-segment borrowings	845	837	91	146	–	–	1,919
Current liabilities[3]	168	56	64	12	1	82	383
Segment liabilities	1,031	905	219	163	4	84	2,406
Borrowings							3,300
Taxes payable							126
Elimination							(1,940)
Total liabilities							3,892

$ million	Aktogay	Bozshakol	East Region and Bozymchak	Mining Projects: Koksay	Corporate Services[4]	Total
						At 31 December 2018
Assets						
Non-current assets[1]	1,178	1,104	335	236	5,325	8,178
Current assets excluding cash and cash equivalents and current investments[2]	255	258	1,944	–	1,746	4,203
Cash and cash equivalents and current investments	55	7	12	25	1,370	1,469
Segment assets	1,488	1,369	2,291	261	8,441	13,850
Taxes receivable						46
Elimination						(8,856)
Total assets						5,040
Liabilities						
Non-current liabilities	9	6	59	3	–	77
Inter-segment borrowings	676	941	121	–	–	1,738
Current liabilities[3]	94	99	68	25	1,892	2,178
Segment liabilities	779	1,046	248	28	1,892	3,993
Borrowings						3,453
Taxes payable						87
Elimination						(3,547)
Total liabilities						3,986

1 Non-current assets includes property, plant and equipment, mining assets and intangible assets which are located in the principal country of operations of each operating segment. Aktogay, Bozshakol and Koksay (within Mining Projects) segments principally operate in Kazakhstan. The East Region and Bozymchak segment includes property, plant and equipment, mining assets and intangible assets of $303 million relating to the East Region assets located in Kazakhstan and $52 million of Bozymchak assets located in Kyrgyzstan (2018: $253 million and $55 million respectively). The Baimskaya (within Mining Projects) segment relates to assets located in Russia. Additionally, included within non-current assets is long-term stockpiled ore of $135 million at Bozshakol and $42 million at Aktogay (2018: $111 million and $15 million respectively).

2 Current assets excluding cash and cash equivalents and current investments comprise inventories, prepayments and other current assets and trade and other receivables, including intragroup non-financing receivables.

3 Current liabilities comprise trade and other payables, including intragroup non-financing related payables, and other current liabilities including provisions.

4 Corporate Services non-current assets include $6,216 million of intra-group investments while current assets include $1,919 million of inter-segment loans, which are eliminated within total assets (2018: $5,309 million and $1,738 million respectively).

(iii) Capital expenditure[1]

$ million	Aktogay[2]	Bozshakol[3]	East Region and Bozymchak	Mining Projects Baimskaya[4]	Mining Projects Koksay	Corporate Services	Total
							Year ended 31 December 2019
Property, plant and equipment	549	89	53	45	–	1	737
Mining assets	3	3	45	501	5	–	557
Intangible assets	1	–	–	–	–	–	1
Capital expenditure	**553**	**92**	**98**	**546**	**5**	**1**	**1,295**

$ million	Aktogay[2]	Bozshakol	East Region and Bozymchak	Mining Projects Koksay	Corporate Services	Total
						Year ended 31 December 2018
Property, plant and equipment	512	25	29	–	1	567
Mining assets	1	4	40	1	–	46
Intangible assets	1	–	1	–	–	2
Capital expenditure	514	29	70	1	1	615

1 Capital expenditure presented by operating segment reflects cash paid and is aligned with the Group's internal capital expenditure reporting. Capital expenditure includes non-current advances paid for items of property, plant and equipment and mining assets.

2 Includes the final $19 million (2018: $281 million) settled in respect of the $300 million NFC deferral (see note 29(c)).

3 Includes $37 million for the payment of final retentions relating to the construction of the sulphide and clay plants.

4 Includes $436 million paid on 22 January 2019 to acquire the asset (see note 5(a)).

(b) Information in respect of revenues

Revenues by product to third parties are as follows:

$ million	Aktogay	Bozshakol	East Region and Bozymchak	Total
				Year ended 31 December 2019
Copper cathodes	394	60	374	828
Copper in concentrate	455	541	–	996
Gold	4	49	80	133
Gold in concentrate	–	185	–	185
Silver	3	1	36	40
Silver in concentrate	7	12	–	19
Zinc in concentrate	–	–	58	58
Other revenues including other by-products	–	3	4	7
	863	**851**	**552**	**2,266**

$ million	Aktogay	Bozshakol	East Region and Bozymchak	Total
				Year ended 31 December 2018
Copper cathodes	206	67	417	690
Copper in concentrate	558	529	–	1,087
Gold	–	–	68	68
Gold in concentrate	–	144	–	144
Silver	1	2	37	40
Silver in concentrate	6	9	–	15
Zinc in concentrate	–	–	101	101
Other revenues including other by-products	4	5	8	17
	775	756	631	2,162

4. Segment information continued

(b) Information in respect of revenues continued

Most of the Group's sales agreements are based on provisional pricing with the final pricing usually determined by the average market price of the respective metal in the month (for gold and silver bar), the month following (for copper cathode and zinc concentrate) or the second month following (for copper concentrate including by-products) dispatch to the customer. At 31 December, the Group's provisionally priced volumes and their respective average provisional price were as follows:

	At 31 December 2019		At 31 December 2018	
	Provisionally priced volumes	Weighted average provisional price	Provisionally priced volumes	Weighted average provisional price
Copper cathodes	**9 kt**	**5,919 $/t**	4 kt	6,244 $/t
Copper in concentrate[1]	**32 kt**	**5,338 $/t**	29 kt	5,558 $/t
Gold in concentrate[1]	**23 koz**	**1,502 $/oz**	21 koz	1,217 $/oz
Silver in concentrate[1]	**184 koz**	**17 $/oz**	113 koz	14 $/oz
Zinc in concentrate[1]	**1 kt**	**1,784 $/t**	2 kt	2,102 $/t

1 Payable metal in concentrate. Typically priced after deduction of a processing charge.

The final prices for the provisionally priced volumes shown above will be determined during the quarter after the year end. At 31 December 2019, sales contracts which had not been finally priced were marked to market to reflect the expected settlement price based on the appropriate forward metal price (typically one month for copper cathode and zinc concentrate and two months for copper concentrate including by-products). This adjustment increased revenue by $12 million (2018: $7 million decrease). The cumulative commodity pricing adjustments recorded during 2019 between the final price and the forward price at the expected settlement date, at the time of the sale, resulted in a $26 million increase (2018: $17 million reduction) which is included within revenue.

Revenues by destination from sales to third parties are as follows:

	Year ended 31 December 2019			
$ million	Aktogay	Bozshakol	East Region and Bozymchak	Total
China	**836**	**546**	**350**	**1,732**
Europe	**23**	**256**	**103**	**382**
Kazakhstan and Central Asia	**4**	**49**	**99**	**152**
	863	**851**	**552**	**2,266**

	Year ended 31 December 2018			
$ million	Aktogay	Bozshakol	East Region and Bozymchak	Total
China	600	527	298	1,425
Europe	175	229	209	613
Kazakhstan and Central Asia	–	–	124	124
	775	756	631	2,162

The Group's copper concentrate sales and certain copper cathode and zinc sales have been contracted to Advaita Trade Private Limited and its subsidiaries ('Advaita'). Advaita is a metals trading group with significant experience in marketing metals the Group produces into China and Europe. Sales from all the Group's segments to Advaita comprise 87% ($1,971 million) of revenues (2018: 83% or $1,788 million).

5. Acquisition of the Baimskaya copper project and part disposal of Koksay

(a) Baimskaya copper project

On 22 January 2019, the Group announced the Initial Completion of the acquisition of the Baimskaya copper project in the Chukotka region of Russia. The consideration due at Initial Completion was $675 million made up of $436 million in cash and 22.3 million new KAZ Minerals shares valued at $239 million, which were allotted to the Vendor. The 22.3 million shares are subject to a three-year lock-up period ending on the third anniversary of Initial Completion. Deferred Consideration of $225 million for the remaining interest is payable in 21.0 million shares, subject to the achievement of certain Project Delivery Conditions, including a pre-determined level of throughput and development of infrastructure by the Russian state. To the extent these conditions are not met or waived by the Group and therefore not settled in shares, the Deferred Consideration will become payable in cash on 31 March 2029.

As part of the consideration is settled in shares, the transaction falls within the scope of IFRS 2 '*Share-based Payment*'. The Initial Consideration of 22.3 million KAZ Minerals PLC shares valued at $239 million has been recognised as an increase in share capital of around $6 million and share premium of $233 million. The Deferred Consideration of $225 million has also been included within equity (see note 24(c)(iii)), representing the Group's ability to settle this amount through the issue of 21.0 million shares. The Group obtained a 75% equity stake in the project on Initial Completion, however no non-controlling interest is recognised as the remaining 25% will be purchased through Deferred Consideration.

The total consideration for the acquisition was $900 million, of which around $880 million has been reflected as a mining licence within mining assets, $13 million in net deferred tax assets and $7 million relating to other non-current assets, income taxes prepaid and cash and cash equivalents ($1 million). Other long-term advances of $15 million, relating to amounts transferred to the Baimskaya copper project for study costs, ahead of Initial Completion, were also reclassified to mining assets (see note 18).

(b) Koksay

On 8 June 2018, KAZ Minerals announced an agreement for NFC to invest $70 million for a 19.4% equity stake in the Group's Koksay project. In July 2019, the Group transferred a 19.4% equity stake in KAZ Minerals Koksay B.V., the parent company of the entity which holds the Koksay mining licence in Kazakhstan, to NFC following completion of the transaction. The $70 million cash consideration (including $25 million received in December 2018) was reflected as a current liability pending completion of the transaction (see note 29(a)). Following completion, NFC's interest in KAZ Minerals Koksay B.V. was reflected as a non-controlling interest of $59 million, being its share of Koksay's net assets, with the remaining amount recognised directly within equity and attributed to the Group's shareholders. The $70 million invested by NFC will be used solely for the development of Koksay, including a feasibility study, which will determine the detailed design for mining and processing operations and the associated capital budget. The Board will review the results of the feasibility study to assess how and when to proceed with the project.

6. Cost of sales, selling and distribution expenses and administrative expenses

(a) Cost of sales

$ million	2019	2018
Raw materials	**322**	304
Employee salaries and payroll taxes	**126**	119
Production overheads	**109**	100
Refining services	**91**	72
Energy and utilities	**54**	58
Other taxes	**21**	18
Depreciation, depletion and amortisation	**247**	247
Mineral extraction tax	**205**	197
Change in work in progress and finished goods	**(51)**	(38)
	1,124	1,077

(b) Selling and distribution expenses

$ million	2019	2018
Transportation expenses	**75**	77
Royalties	**9**	10
Other	**7**	7
	91	94

(c) Administrative expenses

$ million	2019	2018
Employee salaries and payroll taxes	**54**	52
Social responsibility costs	**25**	10
Legal and professional fees	**14**	17
Supplies	**8**	7
Business travel	**6**	6
Levies and charges	**6**	5
Utilities	**5**	6
Depreciation and amortisation	**4**	3
Personal injury claims	**1**	–
Other	**9**	9
	132	115

7. Impairment losses

$ million	2019	2018[1]
Impairment charges against property, plant and equipment	**1**	16
Impairment charges against mining assets	**2**	4
Impairment charges against current VAT receivable	**2**	9
	5	29

1 In 2018, impairment charges against property, plant and equipment ($16 million) and mining assets ($4 million) were considered to be special items for the purposes of determining the Group's key financial indicators of EBITDA and Underlying Profit (see note 14).

An assessment of the key external and internal factors affecting the Group and its CGUs at 31 December 2019 did not identify any indicators of impairment or reversal thereof at any of the Group's CGUs (see note 3). The impairments noted in the table above for 2019 relate to specifically identified assets that are no longer expected to be utilised and therefore have been impaired to their estimated recoverable amount.

In 2018, the Bozymchak CGU was subject to an impairment review following the identification of an impairment indicator, being adverse court rulings relating to the recovery of VAT incurred on the construction of the plant. The Bozymchak operation is reflected within the East Region and Bozymchak segment. A total impairment of $20 million was recognised, with $16 million recorded against property, plant and equipment and $4 million against mining assets. The impairment charge reduced the carrying value of the Bozymchak operation to its estimated recoverable amount of $84 million at 31 December 2018, which was determined as its fair value less cost to sell on a discounted cash flow basis. The risk adjusted cash flow forecasts were discounted at a post tax nominal discount rate of 12%.

The key assumptions and estimates made in determining the cash flows were the future prices of copper and gold and the discount rate. The price estimates used were consistent with those applied by the Directors in considering whether commodity prices were an indicator of impairment, with reference to a long-term copper price of $6,700/t (see note 3). The fair value less cost to sell estimate is a fair value measure that is categorised within Level 3 of the fair value hierarchy.

8. Special items

Special items are those items which are non-recurring or variable in nature and which do not impact the underlying trading performance of the business.

$ million	2019	2018
Special items within operating profit		
Impairment charges against property, plant and equipment	–	16
Impairment charges against mining assets	–	4
	–	20

Further information on special items is in the Financial review on page 42.

9. Employee information

$ million	2019	2018
Wages and salaries	197	166
Social security costs – employer contributions	21	18
Employee benefits – note 27	1	–
	219	184

In 2019, employee costs included $37 million (2018: $13 million) capitalised to property, plant and equipment and mining assets primarily related to the construction of the major growth projects. Of the employee costs capitalised, $15 million (2018: $2 million) relates to the Group's share of costs at its joint operation, ICG.

The average monthly number of employees within the operations and shown by segment, during the year, was as follows:

	2019	2018
Aktogay	4,166	2,107
Bozshakol	1,702	1,681
East Region and Bozymchak	9,224	9,541
Mining Projects	64	7
Central services including Corporate	481	436
	15,637	13,772

Analysed by location of employees as:

	2019	2018
Central Asia[1]	15,543	13,735
UK	32	32
Russia	46	–
Rest of the world	16	5
	15,637	13,772

1 Includes Kazakhstan and Kyrgyzstan.

The average monthly number of employees at ICG was 4,148 (2018: 690) with the Group's proportionate share included in the above table.

10. Key management personnel

In accordance with IAS 24 '*Related Party Disclosures*', key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly. Key management personnel in 2019 were deemed to be the Directors of the Company, the Chief Financial Officer, the Aktogay General Director, the Bozshakol General Director and the General Director for the Group's Mining Projects. In 2018, key management personnel additionally included the roles of Chief Operating Officer, the East Region General Director, the Bozymchak General Director and the General Director of KAZ Minerals Management LLP.

Compensation for key management personnel (including Directors) comprises the following:

$ million	2019	2018
Salaries	5.5	6.7
Annual bonuses	3.2	3.4
Share awards[1]	2.5	2.5
Benefits	0.3	0.4
	11.5	13.0

1 Share awards are long-term in nature and may be awarded with a vesting period of up to three years and reflect the IFRS 2 charge.

The aggregate amount paid and accrued in respect of Directors was £6.1 million (2018: £5.9 million), including £1.1 million (2018: £1.1 million) in fees and expenses paid to non-executive Directors and £3.1 million (2018: £3.0 million) in fixed remuneration and annual performance bonus, excluding LTIP share awards, paid to executive Directors. Details are included in the Directors' Remuneration Report (see pages 109 and 113).

11. Auditor's remuneration

The auditor's remuneration for services provided to the Group during the year ended 31 December 2019 was $1.7 million (2018: $1.5 million), comprised as follows:

$ million	2019	2018
Audit and other services:		
Amounts receivable by the Company's auditor and its associates for the audit of these financial statements	0.7	0.6
Amounts receivable by the Company's auditor and its associates in respect of:		
– the audit of financial statements of subsidiaries of the Company	0.8	0.7
– audit-related assurance services	0.2	0.2
Total remuneration	1.7	1.5

12. Finance costs

$ million	2019	2018
Interest expense	189	236
Total interest expense	226	240
Less: amounts capitalised to the cost of qualifying assets[1]	(37)	(4)
Interest on employee obligations	1	1
Unwinding of discount on provisions and other liabilities	5	5
Fair value losses on debt related derivative financial instruments	–	3
	195	245

1 In 2019, the Group capitalised to the cost of the Aktogay expansion project $6 million of borrowing costs from the DBK-Aktogay expansion facility at an average rate of interest of 5.98%. The Group also capitalised to the cost of the Aktogay expansion and the Baimskaya copper project and other qualifying assets $31 million of borrowing costs at an average rate of interest of 6.97% from all other borrowings outstanding during the year, which are regarded as general borrowings for Group reporting purposes. This follows the adoption on 1 January 2019 of *'Borrowing Costs Eligible for Capitalisation (Amendments to IAS 23)'*, whereby project specific borrowings are included as general borrowings once those assets are operating as intended and therefore the associated interest will become available for capitalisation on other qualifying assets (see note 2(e)). In 2018, the Group capitalised to the cost of the Aktogay expansion project $4 million of general borrowing costs from the PXF facility only, at an average rate of interest of 4.97%. The interest cost on borrowings capitalised to qualifying assets is deductible for tax purposes against income in the current year.

Further information relating to finance costs is in the Financial review on page 42.

13. Income taxes

(a) Income tax expense

Major components of income tax expense are:

$ million	2019	2018
Current income tax		
Corporate income tax – current period (UK)	–	–
Corporate income tax – current period (overseas)	117	83
Corporate income tax – prior periods (overseas)	2	1
	119	84
Deferred income tax		
Corporate income tax – current period temporary differences	35	49
Corporate income tax – prior periods temporary differences	1	(1)
	36	48
	155	132

A reconciliation of the income tax expense applicable to the accounting profit before tax at the statutory income tax rate, to the income tax expense at the effective income tax rate, is as follows:

$ million	2019	2018
Profit before tax	726	642
At UK statutory income tax rate of 19.0%	138	122
Underprovided in prior periods – current income tax	2	1
Under/(over) provided in prior periods – deferred income tax	1	(1)
Effect of domestic tax rates applicable to individual Group entities	(2)	5
Tax effect of non-deductible items:		
Transfer pricing	2	1
Other non-deductible expenses	14	4
	155	132

Corporate income tax ('CIT') is calculated at 19.0% (2018: 19.0%) of the assessable profit for the year for the Company and its UK subsidiaries and 20.0% for the operating subsidiaries in Kazakhstan (2018: 20.0%) and Russia. In Kyrgyzstan, changes to legislation applicable from November 2017 have reduced CIT to 0%, replaced by a tax on gold revenues, which is reflected as royalties within selling expenses.

Historical tax years relating to various companies within the Group remain open for tax audits. The tax authorities in Kazakhstan are able to raise additional tax assessments for five years after the end of the relevant tax period. In Kyrgyzstan, tax authorities are able to raise additional tax assessments for a period of six years after the end of the relevant tax period. In Russia, the tax authorities are able to raise additional tax assessments for a period of three years prior to the year of review. In all three jurisdictions, under certain circumstances, historical tax years may remain open for inspection for longer periods.

Effective tax rate

The effective tax rate was 21% (2018: 21%). Tax charges are affected by the mix of profits and tax jurisdictions in which the Group operates. The impact of unrecognised tax losses and non-deductible items increases the Group's overall effective tax rate.

The following factors impacted the effective tax rate for the year ended 31 December 2019:

Other non-deductible expenses

The 2019 non-deductible items are mainly comprised of certain social responsibility costs, fines and penalties, and other non-deductible expenses. The 2018 non-deductible items are mainly comprised of impairment of VAT receivable at the East Region operations and costs relating to the acquisition of the Baimskaya copper project.

Further information relating to income taxes and the change in the effective tax rate is in the Financial review on page 43.

(b) Recognised deferred tax assets and liabilities

The amounts of deferred tax (liabilities)/assets provided in the consolidated financial statements are as follows:

$ million	At 1 January 2019	Acquisition of the Baimskaya copper project	Charged to income statement	Charged to other comprehensive income	Net exchange adjustment	At 31 December 2019
Capital allowances	(103)	(17)	(24)	–	(1)	(145)
Inventories and receivables	4	–	(7)	–	–	(3)
Borrowings	(10)	–	1	–	–	(9)
Provisions and employee benefits	14	–	3	–	–	17
Trade and other payables	12	–	3	–	1	16
Tax losses	33	30	(12)	–	2	53
Share-based payment schemes	2	–	–	(1)	–	1
Deferred tax (liability)/asset, net	(48)	13	(36)	(1)	2	(70)
Analysed as:						
Deferred tax asset	28	13	(2)	(1)	2	40
Deferred tax liability	(76)	–	(34)	–	–	(110)

$ million	At 1 January 2018	Charged to income statement	Charged to other comprehensive income	Net exchange adjustment	At 31 December 2018
Capital allowances	(89)	(30)	–	16	(103)
Inventories and receivables	(2)	6	–	–	4
Borrowings	(25)	15	–	–	(10)
Provisions and employee benefits	16	–	–	(2)	14
Trade and other payables	14	(1)	–	(1)	12
Tax losses	76	(38)	–	(5)	33
Share-based payment schemes	5	–	(3)	–	2
Deferred tax (liability)/asset, net	(5)	(48)	(3)	8	(48)
Analysed as:					
Deferred tax asset	65	(42)	(3)	8	28
Deferred tax liability	(70)	(6)	–	–	(76)

(c) Unrecognised deferred tax assets

Deferred tax assets not recognised in the consolidated financial statements are as follows:

$ million	2019	2018
UK – losses carried forward		
Temporary difference	80	85
Deferred tax asset	14	14

Certain companies in the UK have tax losses that can be carried forward and used against future taxable profits and interest income. There is no time restriction on the utilisation of tax losses. Where there is sufficient certainty that a taxable profit or interest income will arise in these companies against which the losses can be offset, deferred tax assets are recognised.

(d) Unrecognised deferred tax liability

The gross temporary differences in respect of the undistributed reserves of the Group's Kazakhstan subsidiaries, as shown in their statutory accounts prepared in accordance with applicable accounting standards and translated at the historical rate where relevant, are as follows:

$ million	2019	2018
Undistributed reserves of subsidiaries subject to withholding tax on distribution[1]	973	546

1 The reserves are presented at historical exchange rates. At the closing exchange rates they are $906 million (2018: $473 million).

The Group has not recognised a deferred tax liability in respect of the distributable reserves of its subsidiaries, as (i) it controls the timing of any such distribution and the temporary differences are not expected to reverse in the foreseeable future and (ii) under certain conditions withholding tax may not be payable.

14. Earnings per share

The following reflects the income and share data used in the EPS computations:

$ million (unless otherwise stated)	2019	2018
Net profit attributable to equity holders of the Company	571	510
Special items net of tax – note 8	–	20
Underlying Profit[1] and net profit attributable to equity holders of the Company	571	530
Weighted average number of ordinary shares of 20 pence each for EPS calculation – basic	470,215,553	447,331,406
Potential dilutive ordinary shares, weighted for the period outstanding	19,801,180	–
Weighted average number of ordinary shares of 20 pence each for EPS calculation – diluted	490,016,733	447,331,406
Ordinary EPS – basic ($)	1.21	1.14
Ordinary EPS – diluted ($)	1.17	1.14
EPS based on Underlying Profit[1] – basic ($)	1.21	1.18
EPS based on Underlying Profit[1] – diluted ($)	1.17	1.18

1 Alternative Performance Measures (APMs) are used to assess the performance of the Group and are not defined or specified under IFRS. For further information on APMs, including justification for their use, please refer to the APMs section on page 184.

Basic EPS (both Ordinary EPS and EPS based on Underlying Profit) is calculated by dividing net profit or Underlying Profit for the period attributable to equity holders of the Company by the weighted average number of ordinary shares of 20 pence each outstanding during the year. Purchases of the Company's shares by the Employee Benefit Trust and by the Company under any share buy-back programmes are held in treasury and treated as own shares.

For the purposes of calculating diluted EPS, it is assumed that the $225 million Deferred Consideration arising on the acquisition of the Baimskaya copper project (see note 5(a)) will be settled in 21.0 million shares, reflecting the Group's ability to waive the Project Delivery Conditions that are not met and settle in shares.

The resulting 21,009,973 potential ordinary shares were weighted over the period they were outstanding, from acquisition on 22 January 2019 to 31 December 2019, providing an additional 19,801,180 shares included in the calculation of diluted EPS. To the extent these conditions are not met or waived by the Group and therefore not settled in shares, the Deferred Consideration will become payable in cash on 31 March 2029.

Further information relating to EPS based on Underlying Profit is in the Financial review on page 43.

15. Dividends

(a) Dividends paid

The dividends paid during the years ended 31 December 2019 and 2018 are as follows:

	Per share US cents	Amount $ million
Year ended 31 December 2019		
Interim dividend in respect of year ended 31 December 2019	4.0	19
Final dividend in respect of year ended 31 December 2018	6.0	28
Year ended 31 December 2018		
Interim dividend in respect of year ended 31 December 2018	6.0	27

The interim dividend of $19 million in respect of the year ended 31 December 2019 and the final dividend of $28 million in respect of the year ended 31 December 2018 was paid to shareholders on the register which included the new shares issued in January 2019 as part settlement of the acquisition of the Baimskaya copper project.

(b) Dividends declared after the balance sheet date

	Per share US cents	Amount $ million
Recommended by the Directors on 19 February 2020 (not recognised as a liability at 31 December 2019)		
Final dividend in respect of year ended 31 December 2019	8.0	38

16. Property, plant and equipment

$ million	Land and buildings	Plant and equipment	Other	Construction in progress	Total
Cost					
At 1 January 2018	1,023	1,895	137	70	3,125
Additions	12	21	6	130	169
Capitalised borrowing costs	–	–	–	4	4
Transfers	(1)	43	14	(56)	–
Disposals	–	(9)	(3)	(1)	(13)
Net exchange adjustment	(119)	(256)	(17)	(14)	(406)
At 31 December 2018	915	1,694	137	133	2,879
Additions	**25**	**38**	**17**	**735**	**815**
Capitalised borrowing costs	**–**	**–**	**–**	**34**	**34**
Capitalised depreciation	**–**	**–**	**–**	**6**	**6**
Transfers	**106**	**25**	**37**	**(168)**	**–**
Disposals	**(12)**	**(12)**	**(3)**	**(1)**	**(28)**
Net exchange adjustment	**8**	**13**	**1**	**8**	**30**
At 31 December 2019	**1,042**	**1,758**	**189**	**747**	**3,736**
Depreciation and impairment					
At 1 January 2018	234	282	51	23	590
Depreciation charge	41	172	24	–	237
Transfers	2	–	–	(2)	–
Disposals	–	(9)	(3)	–	(12)
Impairment	11	3	2	–	16
Net exchange adjustment	(20)	(51)	(7)	(4)	(82)
At 31 December 2018	268	397	67	17	749
Depreciation charge	**60**	**158**	**24**	**–**	**242**
Transfers	**3**	**(6)**	**3**	**–**	**–**
Disposals	**(5)**	**(11)**	**(3)**	**–**	**(19)**
Impairment	**–**	**–**	**–**	**1**	**1**
Net exchange adjustment	**2**	**4**	**1**	**–**	**7**
At 31 December 2019	**328**	**542**	**92**	**18**	**980**
Net book value					
At 31 December 2019	**714**	**1,216**	**97**	**729**	**2,756**
At 31 December 2018	647	1,297	70	116	2,130

17. Mining assets

$ million	Mineral licences and properties	Exploration costs	Mine development costs	Mine stripping costs	Construction in progress	Total
Cost						
At 1 January 2018	240	18	268	61	33	620
Additions	–	4	3	6	33	46
Transfers	–	–	6	–	(6)	–
Net exchange adjustment	(6)	(2)	(27)	(7)	(8)	(50)
At 31 December 2018	234	20	250	60	52	616
Additions[1]	880	94	4	2	46	1,026
Capitalised borrowing costs	–	–	–	–	3	3
Capitalised depletion	–	–	–	1	–	1
Transfers	–	–	21	–	(21)	–
Disposals	–	–	(13)	–	–	(13)
Net exchange adjustment	6	4	3	–	–	13
At 31 December 2019	**1,120**	**118**	**265**	**63**	**80**	**1,646**
Depletion and impairment						
At 1 January 2018	1	–	162	19	–	182
Depletion charge	–	–	9	4	–	13
Impairment	–	2	–	2	–	4
Net exchange adjustment	–	–	(14)	(1)	–	(15)
At 31 December 2018	1	2	157	24	–	184
Depletion charge	–	–	11	4	–	15
Disposals	–	–	(13)	–	–	(13)
Impairment	–	–	–	–	2	2
Net exchange adjustment	–	–	1	–	–	1
At 31 December 2019	**1**	**2**	**156**	**28**	**2**	**189**
Net book value						
At 31 December 2019	**1,119**	**116**	**109**	**35**	**78**	**1,457**
At 31 December 2018	233	18	93	36	52	432

1 Additions to mineral licences and properties relate to the acquisition of the Baimskaya copper project (see note 5(a)). Additions to exploration costs include $15 million reclassified from other long-term advances, relating to amounts transferred to the Baimskaya copper project for study costs, ahead of Initial Completion (see note 18).

18. Other non-current assets

$ million	2019	2018
Non-current inventories[1]	176	127
Advances paid for property, plant and equipment and mining assets	144	147
Non-current VAT receivable[2]	15	11
Long-term bank deposits[3]	4	3
Other long-term advances[4]	–	15
Gross value of other non-current assets	339	303
Provision for impairment	(1)	(2)
	338	301

1 Non-current inventories comprise ore stockpiles that are expected to be processed in excess of 12 months from the balance sheet date and relate mainly to clay ore at Bozshakol and low grade sulphide ore at Aktogay.

2 Comprises VAT incurred at Bozymchak which is subject to audit and other administrative procedures prior to refund, with anticipated refund dates in excess of 12 months from the balance sheet date.

3 Long-term bank deposits are monies placed in escrow accounts with financial institutions in Kazakhstan and Kyrgyzstan as required by the Group's site restoration obligations.

4 Other long-term advances of $15 million at 31 December 2018 related to amounts transferred to the Baimskaya copper project for study costs which were reclassified to mining assets on Initial Completion of the Baimskaya copper project (see note 17).

19. Inventories

$ million	2019	2018
Raw materials and consumables	358	248
Work in progress	156	115
Finished goods	45	82
Gross value of inventories	559	445
Inventories provision	(6)	(6)
	553	439

20. Prepayments and other current assets

$ million	2019	2018
Advances paid for goods and services	20	20
VAT receivable	175	72
Other	7	4
Gross value of prepayments and other current assets	202	96
Provision for impairment of prepayments and other current assets	(9)	(6)
	193	90

21. Trade and other receivables

$ million	2019	2018
Trade receivables[1]	176	125
Interest receivable	1	3
Gross value of trade and other receivables	177	128
Allowance for expected credit losses	(1)	(1)
	176	127

1 At 31 December 2019, $158 million of trade receivables related to provisionally priced contracts measured at fair value through profit and loss (2018: $114 million), as outlined in note 33(b), including an increase of $12 million (2018: reduction of $7 million) arising from marked to market adjustments at 31 December 2019.

22. Current investments

$ million	2019	2018
Current investments[1]	–	250
	–	250

1 Include term deposits with original maturity of greater than three months.

23. Cash and cash equivalents

$ million	2019	2018
Cash deposits with short-term initial maturities[1]	517	1,157
Cash at bank[2]	24	62
	541	1,219

1 Excludes term deposits with original maturity of greater than three months classified within current investments. Included within cash and cash equivalents is $64 million (2018: $25 million) which is to be used solely for the investment into the Koksay project (see note 5(b)).

2 At 31 December 2018, cash at bank of $2 million was restricted by legal or contractual arrangements and was excluded from the Group's measure of net debt (see note 32).

24. Share capital and reserves

(a) Allotted share capital

	Number	£ million	$ million
Allotted and called up share capital – ordinary shares of 20 pence each			
At 1 January 2018, 31 December 2018 and 1 January 2019	458,379,033	92	171
Shares issued	22,344,944	4	6
At 31 December 2019	**480,723,977**	**96**	**177**

On 22 January 2019, the Company issued 22,344,944 KAZ Minerals PLC shares allotted as part of the Initial Consideration for the Baimskaya copper project (see note 5(a)). The issued share capital was fully paid.

During the year, 1,859,786 (2018: 1,396,856) treasury shares were used to satisfy awards under the Company's Save As You Earn ('SAYE'), Long Term Incentive Plans ('LTIP') and Deferred Share Bonus Plan ('DSBP') schemes. At 31 December 2019, the Company holds 8,287,104 (2018: 10,146,890) ordinary shares in treasury and the issued share capital of the Company which carries voting rights of one vote per share, comprised 472,436,873 (2018: 448,232,143) ordinary shares (excluding treasury shares).

(b) Own shares purchased under the Group's share-based payment plans

The provision of shares to the Group's share-based payment plans is facilitated by an Employee Benefit Trust (the 'Trust'). The cost of shares purchased by the Trust is charged against retained earnings as treasury shares. The Trust has waived the right to receive dividends on these shares. The Company made no purchases through the Trust in 2019 or 2018. No shares (2018: 14,565) were transferred out of the Trust in settlement of share awards granted to employees that were exercised during the year. Following approval from shareholders, shares held in treasury will be used to settle future awards.

At 31 December 2019, the Group, through the Trust, owned 5,162 shares in the Company (2018: 5,162) with a market value of $36 thousand and a cost of $79 thousand (2018: $35 thousand and $79 thousand respectively). The shares held by the Trust represented less than 0.01% (2018: 0.01%) of the issued share capital at 31 December 2019.

(c) Capital reserves

$ million	Notes	Currency translation reserve	Capital redemption reserve	Deferred Consideration reserve	Total
At 1 January 2018		(2,060)	31	–	(2,029)
Exchange differences on retranslation of foreign operations		(428)	–	–	(428)
At 31 December 2018		(2,488)	31	–	(2,457)
Exchange differences on retranslation of foreign operations		65	–	–	65
Deferred Consideration on acquisition of the Baimskaya copper project	5(a)	–	–	225	225
Part disposal of subsidiary	5(b)	9	–	–	9
At 31 December 2019		**(2,414)**	**31**	**225**	**(2,158)**

(i) Currency translation reserve

The foreign currency translation reserve is used to record exchange differences arising from the translation of the financial statements of subsidiaries whose functional currency is not the US dollar into the Group's presentation currency. The increase in the US dollar value of the Group's foreign currency operations of $65 million (2018: decrease of $428 million) follows a 1% increase in the value of the tenge from 31 December 2018 to 31 December 2019.

(ii) Capital redemption reserve

As a result of the share buy-back programme undertaken in 2008 and the repurchase of Company shares in 2013, transfers were made from share capital to the capital redemption reserve based on the nominal value of the shares cancelled.

(iii) Deferred Consideration reserve

On 22 January 2019, the Group announced the Initial Completion of the acquisition of the Baimskaya copper project in the Chukotka region of Russia (see note 5(a)). The Deferred Consideration of $225 million represents the purchase price for the remaining interest in Baimskaya and is payable in 21.0 million shares, subject to the achievement of certain Project Delivery Conditions, including a pre-determined level of throughput and development of infrastructure by the Russian state. To the extent these conditions are not met or waived by the Group and therefore not settled in shares, the Deferred Consideration will become payable in cash on 31 March 2029.

The Deferred Consideration has been included within equity as a separate share-based payment reserve, representing the Group's ability to settle this amount through the issue of 21.0 million shares, measured according to the fair value of the asset acquired on Initial Completion. If the Group decides not to waive any outstanding conditions and settle the Deferred Consideration in cash, the cash payment will be accounted for as the repurchase of an equity interest.

25. Non-controlling interests

Non-controlling interests that are material to the Group are reflected in the table below, relating to the transfer of a 19.4% equity stake in KAZ Minerals Koksay B.V., the parent company of the entity which holds the Koksay mining licence in Kazakhstan, to NFC in July 2019. The principal operations of KAZ Minerals Koksay B.V. relate to the Koksay exploration licence located in Kazakhstan.

Summarised financial information on a 100% basis for Koksay is as follows:

$ million	2019	2018
Non-current assets	**243**	236
Current assets[1]	**64**	25
Non-current liabilities	**(3)**	(3)
Current liabilities	**(1)**	(25)
Net assets	**303**	233
Attributable to non-controlling interests	**59**	–
Attributable to KAZ Minerals PLC	**244**	233
Loss for the year	**(1)**	(1)
Attributable to non-controlling interests	**–**	–
Attributable to KAZ Minerals PLC	**(1)**	(1)
Net increase in cash and cash equivalents	**39**	24
Net cash flows used in operating activities	**(1)**	–
Net cash flows used in investing activities	**(5)**	(1)
Net cash flows from financing activities	**45**	25

1 Current assets comprise cash and cash equivalents of $64 million (2018: $25 million) which are to be used solely for the investment into the Koksay project (see note 5(b)).

In addition, non-controlling interests that were not material to the Group were $4 million at 31 December 2018.

26. Borrowings

	Maturity	Average interest rate during the year	Currency of denomination	Current $ million	Non-current $ million	Total $ million
31 December 2019						
CDB-Bozshakol and Bozymchak (US$ LIBOR + 4.50%)	2025	7.06%	US dollar	**180**	**985**	**1,165**
CDB-Aktogay facility (PBoC 5 year)	2028	5.42%	CNY	**12**	**85**	**97**
CDB-Aktogay facility (US$ LIBOR + 4.20%)	2029	6.69%	US dollar	**105**	**1,012**	**1,117**
Pre-export finance facility (US$ LIBOR + 3.00% to 4.50%)	2021	5.30%	US dollar	**200**	**100**	**300**
DBK-Aktogay facility (US$ LIBOR + 4.50%)	2025	7.11%	US dollar	**43**	**191**	**234**
DBK-Aktogay expansion facility (US$ LIBOR + 3.90%)	2034	5.98%	US dollar	**–**	**315**	**315**
CAT facility (US$ LIBOR + 3.00% to 4.50%)	2024	4.91%	US dollar	**5**	**67**	**72**
				545	**2,755**	**3,300**
31 December 2018						
CDB-Bozshakol and Bozymchak (US$ LIBOR + 4.50%)	2025	6.65%	US dollar	180	1,165	1,345
CDB-Aktogay facility (PBoC 5 year)	2028	5.17%	CNY	12	98	110
CDB-Aktogay facility (US$ LIBOR + 4.20%)	2029	6.45%	US dollar	105	1,116	1,221
Pre-export finance facility (US$ LIBOR + 3.00% to 4.50%)	2021	4.97%	US dollar	200	300	500
DBK-Aktogay facility (US$ LIBOR + 4.50%)	2025	6.70%	US dollar	42	235	277
				539	2,914	3,453

CDB-Bozshakol and Bozymchak facilities

At 31 December 2019, $1.2 billion (2018: $1.3 billion) was drawn under the facility agreements. The facilities accrue interest at US$ LIBOR plus 4.50% and arrangement fees with an amortised cost at 31 December 2019 of $9 million (2018: $12 million) have been netted off against these borrowings in accordance with IFRS 9 '*Financial Instruments*'. During 2019, $183 million of the borrowing was repaid, with $180 million due to be repaid within 12 months of the balance sheet date (including $3 million of unamortised debt costs). The facility is repayable in semi-annual instalments in January and July with final maturity in 2025. KAZ Minerals PLC acts as guarantor of the facilities.

26. Borrowings continued

CDB-Aktogay facilities

The CDB-Aktogay facilities consist of a CNY 1.0 billion facility and a $1.3 billion US dollar facility.

At 31 December 2019, the drawn US dollar equivalent amount under the CNY facility was $97 million (2018: $110 million). The facility accrues interest at the applicable benchmark lending rate published by the People's Bank of China. This facility is repayable in semi-annual instalments in March and September of each year until final maturity in 2028. $12 million was repaid in 2019, while $12 million is due to be repaid within 12 months of the balance sheet date. To protect the Group from currency risks arising on the CNY denominated debt, the Group has entered into CNY/US$ cross currency swaps for a portion of the exposure. This derivative instrument provides a hedge against movements in the CNY exchange rate against the US dollar and also swaps the interest basis from a CNY interest rate into a US$ LIBOR interest basis. The fair value of the swaps at 31 December 2019, included within payables, is $12 million (2018: $12 million).

The US dollar facility accrues interest at US$ LIBOR plus 4.20%. At 31 December 2019, $1.1 billion (2018: $1.2 billion) was outstanding under the facility. Arrangement fees with an amortised cost of $9 million (2018: $11 million) have been netted off against these borrowings in accordance with IFRS 9. The facility is repayable in semi-annual instalments in March and September until final maturity in 2029. During 2019, $107 million was repaid, with $105 million due to be repaid within 12 months of the balance sheet date (including $2 million of unamortised debt costs). KAZ Minerals PLC acts as guarantor of both facilities.

PXF facility

At 31 December 2019, $300 million (2018: $500 million) was drawn under the PXF facility. The facility accrued interest using a variable margin of between 3.00% and 4.50% above US$ LIBOR, dependent on the ratio of net debt to EBITDA tested semi-annually. Principal repayments commenced in July 2018 and were to continue in equal monthly instalments over a three-year period until final maturity in June 2021. During 2019, $200 million of the borrowing was repaid. At 31 December 2019, $200 million was due to be repaid within the next 12 months. KAZ Minerals PLC, Vostoktsvetmet LLC and KAZ Minerals Sales Limited act as guarantors of the facility.

On 28 January 2020, the Group completed an amendment and extension of the PXF which includes an increase in facility commitments to $1.0 billion, an extension of the loan tenor and a reduction in the facility margin (see note 37(a)).

DBK-Aktogay facilities

On 14 June 2019, the Group entered into a $600 million credit facility agreement with DBK relating to the Aktogay expansion project. The Group also has an existing $300 million facility with DBK relating to the original Aktogay project. KAZ Minerals PLC acts as guarantor of these facilities.

The $600 million facility will be drawn in accordance with capital expenditure incurred on certain contracts committed for the Aktogay expansion project, with $320 million drawn at 31 December 2019. Arrangement fees with an amortised cost of $5 million have been netted off against these borrowings in accordance with IFRS 9. The facility extends for a term of 15 years and accrues interest at a rate of US$ LIBOR plus 3.90%. The facility is repayable in instalments with the first repayment due in June 2022, followed by semi-annual repayments in May and November of each year from November 2022 until the final repayment in 2034.

The $300 million facility with DBK was entered into in December 2016 and was fully drawn at 31 December 2016. The facility extends for a term of eight and a half years and accrues interest at US$ LIBOR plus 4.50%. The facility is repayable in semi-annual instalments in May and November with a final repayment in 2025. At 31 December 2019, $235 million (2018: $277 million) was drawn under the facility. Arrangement fees with an amortised cost of $1 million (2018: $1 million) have been netted off against these borrowings in accordance with IFRS 9. During 2019, $43 million of the borrowing was repaid, with $43 million due to be repaid within 12 months of the balance sheet date.

CAT facility

On 15 November 2019, the Group entered into a credit facility of up to $100 million with Caterpillar Financial Services (UK) Limited ('CAT'). At 31 December 2019, $74 million was drawn under the facility. Arrangement fees with an amortised cost of $2 million have been netted off against these borrowings in accordance with IFRS 9. The facility accrues interest with a variable margin of between 3.00% and 4.50% above US$ LIBOR, dependent on the ratio of net debt to EBITDA which will be tested semi-annually. It is comprised of two sub-facilities of $40 million and $60 million secured against existing and new Caterpillar equipment, which will be drawn between December 2019 and March 2021. Quarterly repayments for the existing drawing will commence in December 2020 until final maturity in 2024. KAZ Minerals PLC acts as guarantor of the facility.

Undrawn facilities

At 31 December 2019, $280 million remained to be drawn under the DBK-Aktogay expansion facility and $26 million remained to be drawn under the CAT facility. All other debt facilities were fully drawn at 31 December 2019 and 2018.

27. Employee benefits

Vostoktsvetmet LLC provides post-retirement benefits and other long-term benefits in Kazakhstan which are partially funded. The largest portion of the employee benefits provision is for other long-term benefits, of which the most significant is for long-term disability allowances and which exposes the Group to actuarial risks reflected in the key assumptions below. The other benefits provided include one-time retirement grants, financial aid, dental care, medical benefits, sanatorium visits, annual financial support to pensioners and funeral aid.

The movement in the defined employee benefits obligation is as follows:

$ million	2019	2018
At 1 January	18	19
Actuarial loss arising in the income statement	4	1
Actuarial loss recognised in other comprehensive income	1	–
Interest cost on benefit obligation	1	1
Benefits paid	(2)	(2)
Net exchange adjustment	1	(1)
Defined benefit obligation at 31 December	23	18

The movement in the plan assets is as follows:

$ million	2019	2018
At 1 January	4	3
Contributions by employer	1	1
Benefits paid	(2)	(1)
Actuarial gain on plan assets recognised in the income statement	3	1
Fair value of plan assets at 31 December	6	4

The net actuarial loss arising in the income statement of $1 million (2018: $nil), resulting from a loss on the defined benefit obligation and a gain on the plan assets, was recognised within administrative expenses, while the interest cost on the defined benefit obligation of $1 million (2018: $1 million) was recognised within finance costs.

The net liability and expected settlement of the defined benefit obligation is as follows:

$ million	2019	2018
Defined benefit obligation	23	18
Less: fair value of plan assets	(6)	(4)
Net liability recognised at 31 December	17	14
Current	2	2
Non-current	15	12
	17	14

The net employee benefits obligation of $17 million (2018: $14 million), consists of $2 million (2018: $2 million) related to post-employment benefits and $15 million (2018: $12 million) related to other long-term benefits mainly for disability allowances.

The principal actuarial assumptions used in determining the employee benefit obligation are as follows:

	2019	2018
Discount rate at 31 December	5.2%	7.4%
Future salary increases	3.6%	4.1%
Medical and other related cost increases	3.9%	4.1%

In addition, mortality rates were determined with reference to the 2016 mortality table of Kazakhstan as published by the Government, adjusted by life expectancy in Kazakhstan forecast by the United Nations in 2019.

28. Provision for closure and site restoration

$ million	2019	2018
At 1 January	59	67
Utilised	(1)	(1)
Change in estimate[1]	21	(3)
Disposals	(9)	–
Unwinding of discount	4	4
Net exchange adjustment	–	(8)
At 31 December	74	59
Current	–	1
Non-current	74	58
	74	59

1 In 2019, a $21 million increase in the provision (2018: $3 million reduction) was capitalised to property, plant and equipment.

The costs of decommissioning and reclamation of mines and processing facilities within the Group are based on the current obligations under Kazakhstan and Kyrgyzstan legislation governing closure and rehabilitation. The provision represents the discounted values of the estimated costs to decommission and reclaim the mines based on the current estimated life of mine of each deposit. The present value of these provisions has been calculated using discount rates of between 5.0% and 5.8% in Kazakhstan, depending on the life of each mine (2018: between 6.8% and 7.7%) and 6.7% in Kyrgyzstan (2018: 8.9%). The discount rates used in the estimation of these provisions are determined by reference to long-term bond yields and other factors. The liability usually becomes payable after the end of the useful life of each mine, which ranges from eight years to around 40 years. Uncertainties in estimating these costs include potential changes in regulatory requirements, decommissioning and reclamation alternatives, the levels of discount and inflation rates and the estimated timing of closure and decommissioning. The increased estimate for the provision in 2019 arose mainly from the use of a lower discount rate used to determine the obligation. This was offset by a $9 million reduction for disposals, including the sale of the Belousovsky concentrator to a related party during 2019 (see note 35(a)).

29. Other liabilities

$ million	2019	2018
Advance consideration	–	25
Payments for licences	7	9
Payables to NFC	–	19
Other	8	–
	15	53
Current	3	46
Non-current	12	7
	15	53

(a) Advance consideration

In June 2019, the Group received the remaining $45 million advance consideration from NFC in respect of the agreement for NFC to invest $70 million for a 19.4% equity stake in KAZ Minerals Koksay B.V., the parent company of the entity which holds the Koksay mining licence in Kazakhstan, as announced in June 2018. Following completion of the transaction in July 2019, the advance consideration was reclassified to equity, with NFC's interest in KAZ Minerals Koksay B.V. reflected as a non-controlling interest of $59 million, being its share of Koksay's net assets, and the remaining amount recognised directly within equity and attributed to the Group's shareholders (see note 5(b)).

(b) Payments for licences for mining assets

In accordance with its contracts for subsoil use, the Group is liable to repay the costs of geological information provided by the Government of Kazakhstan for licenced deposits. Some of these obligations are payable in tenge while others are payable in US dollars, depending on the terms of each subsoil use contract. The total amount payable by the Group is discounted to its present value using a discount rate of 7.6% for tenge (2018: 7.6%) and 4.0% for US dollar (2018: 4.0%) obligations. Under the subsoil use agreements, the historical cost payments amortise over a 10-year period and commence with first production.

(c) Payables to NFC

The Group previously reached an agreement with its principal construction contractor at Aktogay, NFC, to defer payment of $300 million, of which $281 million was settled in 2018 and the final $19 million was settled in 2019. The extended credit terms had been discounted using a rate of US$ LIBOR plus 4.20% on the estimated cost of services performed.

30. Trade and other payables

$ million	2019	2018
Payables for non-current assets	128	63
Interest payable	61	71
Trade payables	50	51
Salaries and related payables	22	18
Derivative instrument[1]	12	12
Amounts payable to related parties	4	2
Other payables and accrued expenses	11	6
Payables regarded as financial instruments for disclosure purposes – note 33	288	223
MET and royalties payable	56	48
Other taxes payable	10	9
Payments received in advance from customers	6	40
	360	320

1 Relates to the CNY/US$ cross currency and interest rate swap on the CDB-Aktogay loan. The change in the fair value of the derivative is included within finance costs in the income statement.

31. Reconciliation of profit before tax to net cash inflow from operating activities

$ million	Notes	2019	2018
Profit before tax		726	642
Finance income		(18)	(33)
Finance costs	12	195	245
Share-based payments	36	3	3
Depreciation, depletion and amortisation		251	251
Impairment losses	7	5	29
Unrealised foreign exchange loss/(gain)		20	(8)
Operating cash flows before changes in working capital and provisions		1,182	1,129
Decrease in non-current VAT receivable		–	3
Increase in inventories		(161)	(158)
Increase in prepayments and other current assets		(113)	(30)
(Increase)/decrease in trade and other receivables		(51)	4
(Decrease)/increase in trade and other payables and provisions		(23)	49
Cash flows from operations before interest and income taxes paid		834	997

32. Movement in net debt

$ million	At 1 January 2019	Cash flow	Other movements	At 31 December 2019
Cash and cash equivalents	1,219	(676)	(2)	541
Less: restricted cash	(2)	–	2	–
Current investments	250	(250)	–	–
Borrowings[1]	(3,453)	158	(5)	(3,300)
Net debt[2]	(1,986)	(768)	(5)	(2,759)

$ million	At 1 January 2018	Cash flow	Other movements	At 31 December 2018
Cash and cash equivalents	1,821	(604)	2	1,219
Less: restricted cash	–	–	(2)	(2)
Current investments	–	250	–	250
Borrowings[1]	(3,877)	424	–	(3,453)
Net debt[2]	(2,056)	70	–	(1,986)

1 The cash flows on borrowings in 2019 reflect repayments on existing facilities of $545 million (2018: $424 million) and drawings of $387 million (2018: $nil), net of arrangement fees (see note 26). Other movements include non-cash amortisation of fees on borrowings of $6 million (2018: $6 million) and foreign exchange gains on the CDB-Aktogay CNY facility of $1 million (2018: $6 million).

2 APMs are used to assess the performance of the Group and are not defined or specified under IFRS. For further information on APMs, including justification for their use, please refer to the APMs section on page 184.

33. Financial risk management

The main risks arising from the Group's financial instruments are liquidity risk, credit risk, interest rate risk, foreign exchange risk and commodity price risk. These risks arise from exposures that occur in the normal course of business and are managed by the Group's Treasury department in close cooperation with the Group's business divisions under oversight of a Treasury Committee, which is chaired by the Chief Financial Officer. The responsibilities of the Treasury Committee include the monitoring of financial risks, management of the Group's cash resources, debt funding programmes and capital structure, approval of treasury counterparties and relevant transaction limits, and oversight of all significant treasury activities undertaken by the Group. The Treasury department operates as a service centre to the business divisions of the Group and not as a profit centre.

A Group Treasury Policy has been approved by the Board and is periodically updated to reflect developments in the financial markets and the financial exposures facing the Group. The Treasury Policy covers specific areas of financial risk management, in particular liquidity risk, credit risk, interest rate risk, foreign exchange risk and commodity price risk. The Group's Treasury Committee and the Group's Internal Audit department monitor compliance with the Treasury Policy on a regular basis.

The Group's Treasury department prepares monthly treasury reports for senior management which monitor all major financial exposures and treasury activities undertaken by the Group. In addition, a treasury report is prepared for each Board meeting which includes a summary of the credit markets and their impact on the implementation of the Group's strategy, progress on the Group's financing initiatives and the significant financial exposures faced by the Group.

The Group's principal financial instruments comprise borrowings, cash and cash equivalents and one derivative used for risk management purposes. The Group's borrowings, surplus liquidity and derivative financial instrument are controlled and managed centrally by the Group's Treasury department. Liquidity retained within Kazakhstan, Kyrgyzstan and Russia is only held for working capital purposes.

The Group's accounting policies with regard to financial instruments are detailed in note 38(s).

(a) Derivatives, financial instruments and risk management

The Group periodically uses derivative financial instruments to manage certain exposures to fluctuations in commodity prices, interest rates and exchange rates. The Group's philosophy is generally not to hedge its core revenue streams. In periods of significant market volatility or uncertainty, the Group may use derivative instruments as a means of reducing volatility on its operating cash flows. Limits on the size and type of any derivative hedge transaction are laid down by the Board and subject to strict internal controls.

(b) Categories and fair values of financial assets and financial liabilities

The carrying amounts of financial assets and liabilities by categories are as follows:

$ million	Notes	2019	2018
Financial assets at amortised cost			
Long-term bank deposits	18	4	3
Other long-term advances	18	–	15
Trade and other receivables not subject to provisional pricing	21	18	13
Current investments	22	–	250
Cash and cash equivalents	23	541	1,219
		563	1,500
Financial assets at fair value through profit or loss			
Trade receivables subject to provisional pricing[1]	21	158	114
Financial liabilities at amortised cost			
Borrowings[2]	26	(3,300)	(3,453)
Other liabilities	29	(15)	(53)
Trade and other payables[3]	30	(276)	(211)
		(3,591)	(3,717)
Financial liabilities at fair value through profit or loss			
Derivative instrument[4]	30	(12)	(12)

1 Trade receivables subject to provisional pricing include a $12 million favourable adjustment (2018: $7 million adverse) arising from the marked to market valuation on provisionally priced contracts at the year end. These are measured according to quoted forward prices in a market that is not considered active, which is a level 2 valuation method within the fair value hierarchy.

2 The fair value of borrowings approximates its carrying value and is measured by discounting future cash flows using currently available interest rates for debt of similar maturities, which is a level 3 valuation method within the fair value hierarchy.

3 Excludes payments received in advance from customers, other taxes payable and MET and royalties payable that are not regarded as financial instruments.

4 Derivative financial instruments, representing a cross currency and interest rate swap, are measured according to inputs other than quoted prices that are observable for the derivative financial instrument, either directly or indirectly, which is a level 2 valuation method within the fair value hierarchy.

The fair values of each category of financial asset and liability are not materially different from their carrying values as presented.

(c) Foreign exchange risk

The Group's entities have transactional currency exposures which arise from sales or purchases in currencies other than that entity's functional currency. The different functional currencies of the Group's entities are outlined in note 38(a) and the currencies giving rise to this foreign currency risk are primarily the US dollar and the CNY. Exchange gains and losses arise principally from bank deposits, trade and other receivables, borrowings, certain intercompany funding balances that exist within the Group and trade and other payables.

Where possible, the Group attempts to conduct its business, maintain its monetary assets and source corporate debt capital in US dollars to minimise its exposure to other currencies. The Group retains surplus cash balances in US dollars for capital expenditure, servicing of debt, returns to shareholders and acquisitions. Working capital balances are maintained in a mix of US dollars and local currencies depending on the short-term requirements of the business. Whilst there is a strong correlation between many mining input costs and the US dollar, a significant portion of the business' operating costs are denominated in local currencies, particularly the Kazakhstan tenge. Rates of exchange for these currencies relative to the US dollar could fluctuate significantly and may materially impact the profitability of the underlying operations and the net assets of the Group.

The Group generally does not enter into hedging transactions in respect of its exposure to foreign currency risk. From time to time, acquisitions and capital investments may expose the Group to movements in other currencies and the Group will consider hedging such exposures on a case-by-case basis.

To protect the Group from currency risks arising on the CDB-Aktogay CNY denominated debt, the Group has entered into a CNY/US$ cross currency swap. This derivative instrument provides a hedge against movements in the CNY exchange rate against the US dollar and also swaps the interest basis from a CNY interest rate into a US$ LIBOR interest basis. This derivative is measured at fair value with the fair value adjustment recorded in profit and loss.

(i) Foreign currency exposure by balance sheet account profile

The Group's exposure to foreign currency risk based on gross amounts, which include intercompany balances, is shown below. The table sets out the Group's financial assets and liabilities which are denominated in the stated currencies but held in subsidiaries or joint operations with a different functional currency, thereby exposing the Group to transactional net currency gains and losses which are recognised in the income statement:

$ million	US dollar[1]	UK sterling	KZT	CNY	RUB	Other	Total
2019							
Long-term bank deposits	**3**	**–**	**–**	**–**	**–**	**–**	**3**
Trade and other receivables	**519**	**–**	**–**	**–**	**–**	**1**	**520**
Cash and cash equivalents	**39**	**2**	**–**	**2**	**–**	**1**	**44**
Borrowings	**(723)**	**(91)**	**–**	**(97)**	**–**	**–**	**(911)**
Other liabilities	**(8)**	**–**	**–**	**–**	**–**	**–**	**(8)**
Trade and other payables	**(165)**	**(1)**	**–**	**–**	**(2)**	**(15)**	**(183)**
	(335)	**(90)**	**–**	**(95)**	**(2)**	**(13)**	**(535)**

$ million	US dollar[1]	UK sterling	KZT[2]	CNY	RUB	Other	Total
2018							
Long-term bank deposits	2	–	–	–	–	–	2
Trade and other receivables	387	–	–	–	–	1	388
Cash and cash equivalents	85	2	–	4	–	2	93
Borrowings	(326)	(87)	–	(110)	–	–	(523)
Other liabilities	(27)	–	–	–	–	–	(27)
Trade and other payables	(159)	(2)	(1,800)	–	–	(4)	(1,965)
	(38)	(87)	(1,800)	(106)	–	(1)	(2,032)

1 The US dollar net monetary liability arises from KZT, KGS and RUB functional currency entities.

2 In 2018, the KZT net monetary liability arose in a US dollar functional currency entity and related to intercompany balances at 31 December 2018. The Group entered into an intercompany forward exchange contract to hedge the foreign exchange exposure.

33. Financial risk management continued

(c) Foreign exchange risk continued

(ii) Foreign currency sensitivity analysis

The estimated impact of a movement in foreign currencies has been determined based on the balances of financial assets and liabilities at 31 December 2019 that are not denominated in the functional currency of the subsidiary or joint operation. This sensitivity does not represent the income statement impact that would be expected from a movement in exchange rates over the course of a period of time and assumes that all other variables, in particular interest rates, remain constant. A 10% strengthening of the US dollar against the following currencies at 31 December would have changed profit after tax by the amounts shown below.

$ million	2019	2018
KZT[1]	(9)	6
KGS	(7)	(12)
UK sterling	7	7
CNY	8	9
RUB	(12)	–

1 In 2018, the sensitivity excluded the impact of the $1.8 billion KZT balance as this has been internally hedged as described in note 33(c)(i).

A 10% weakening of the US dollar against the above currencies at 31 December would have an equal and opposite effect, on the basis that all other variables remain constant.

(d) Commodity price risk

The Group's revenues and earnings are directly impacted by fluctuations in the prices of the commodities it produces. The Group's principal commodities (copper, gold, silver and zinc) are priced via reference to global metal exchanges, upon which pricing is derived from global demand and supply and influenced by macroeconomic considerations and financial investment cash flows. The pricing of the Group's principal commodities may also include a pre-determined margin or discount depending on the terms of sales contracts. Commodity prices, particularly those derived from global metal exchanges, may fluctuate significantly and may have a material impact on the Group's financial results.

Management closely monitors the impact of fluctuations in commodity prices on the business and uses conservative pricing assumptions and sensitivity analysis for its forecasting and investment appraisals.

In accordance with IFRS 7, the impact of commodity prices has been determined based on the balances of financial assets and liabilities at 31 December 2019. This sensitivity does not represent the income statement impact that would be expected from a movement in commodity prices over the course of a period of time. In addition, the analysis assumes that all other variables remain constant.

A 10% increase/(decrease) in commodity prices after the period end would impact the Group's provisionally priced sales volumes and increase/(decrease) profit after tax by the amounts shown below.

$ million	2019	2018
Copper cathodes	4	2
Copper in concentrate	14	13
Gold	3	2

(e) Interest rate risk

The Group has financial assets and liabilities which are exposed to changes in market interest rates. Changes in interest rates primarily impact borrowings by changing their future cash flows (floating rate debt) or their fair value (fixed rate debt) and deposits. The Group's interest rate management policy is generally to borrow and invest at floating rates of interest. In some circumstances, an element of fixed rate funding may be considered appropriate. Fixed rate hedging using interest rate swaps may be undertaken during periods where the Group's exposure to movements in short-term interest rates is more significant, or in periods when interest rates are perceived to be below long-term historical levels. At 31 December 2019, the Group had an outstanding cross currency and interest rate swap on the CDB-Aktogay CNY facility of $12 million (2018: $12 million).

The exposure of the Group's floating and fixed rate financial assets and liabilities to interest rate risk is as follows:

$ million	At 31 December 2019 Floating rate	Fixed rate	Non-interest bearing	Total
Long-term bank deposits	–	4	–	4
Trade and other receivables	–	–	176	176
Cash and cash equivalents	267	250	24	541
Borrowings	(3,300)	–	–	(3,300)
Other liabilities	–	(7)	(8)	(15)
Trade and other payables[1]	–	–	(288)	(288)
	(3,033)	247	(96)	(2,882)

$ million	At 31 December 2018 Floating rate	Fixed rate	Non-interest bearing	Total
Long-term bank deposits	–	1	2	3
Other long-term advances	–	–	15	15
Trade and other receivables	–	–	127	127
Current investments	–	250	–	250
Cash and cash equivalents	701	453	65	1,219
Borrowings	(3,453)	–	–	(3,453)
Other liabilities	–	(9)	(44)	(53)
Trade and other payables[1]	–	–	(223)	(223)
	(2,752)	695	(58)	(2,115)

1 Trade and other payables exclude payments received in advance from customers, other taxes payable and MET and royalties that are not regarded as financial instruments.

The interest charged on floating rate financial liabilities is based on the relevant benchmark rate (such as LIBOR). Interest on financial instruments classified as fixed rate is fixed until the maturity of the instrument.

In accordance with IFRS 7, the impact of interest rates has been determined based on the balances of financial assets and liabilities at 31 December 2019. This sensitivity does not represent the income statement impact that would be expected from a movement in interest rates or outstanding borrowings over the course of a period of time. In addition, the analysis assumes that all other variables remain constant. The effect on profit after tax of a 1% movement in US$ LIBOR rates, based on the year end net debt position and with all other variables held constant, is estimated to be $23 million (2018: $17 million).

(f) Credit risk

Exposure to credit risk arises as a result of transactions in the Group's ordinary course of business and is applicable to all financial assets and commitments due from third parties. The Group has adopted policies and procedures to control and monitor these exposures to minimise the risk of loss in the event of non-performance by counterparties. The maximum exposure with respect to credit risk is represented by the carrying amount of each financial asset on the balance sheet, as outlined in note 33(b).

Credit risk relating to trade receivables

Sales of metal to customers are made either on receipt of cash prior to delivery and transfer of title of goods, cash on delivery and transfer of title of goods or through letters of credit which are received from the customer's bank. Credit risk on trade receivables is limited. The Group monitors the credit quality of its significant customers on an ongoing basis and receivables that are neither past due nor impaired are considered of good credit quality.

Cash is received prior to delivery and transfer of title of the goods for sales to European customers. Sales to Chinese customers are predominantly made under letters of credit which are obtained prior to delivery and transfer of title of the goods. For sales made to Chinese customers without letters of credit, cash is received prior to delivery and transfer of title of the goods.

Sales to European and Chinese customers are subject to provisional pricing and then final pricing adjustments. The Group is therefore exposed to the residual final pricing adjustment for each sales transaction although such amounts are not considered material in the context of the Group's overall revenues. The impairment requirements of IFRS 9 relating to expected credit losses do not apply to the Group's trade receivables subject to provisional pricing, which are measured at fair value through profit or loss.

33. Financial risk management continued

(f) Credit risk continued

Credit risk relating to trade receivables continued

The East Region may at times provide certain social services to municipal authorities in the communities in which it operates as part of its contractual obligations under its subsoil licences. For most receivable balances due from municipal authorities, if any, expected credit losses are recognised on a forward-looking basis taking into account past payment history. The Group applies a simplified approach to measure the loss allowance for trade receivables not subject to provisional pricing and possible default events have been considered over the lifetime of those receivables. The effect of this assessment has not resulted in a material revision in the loss allowance compared to the prior year.

(i) Concentrations for trade and other receivables by geographical regions

At 31 December 2019, one customer (2018: one customer) accounted for 86% (2018: 87%) of the trade and other receivables balance. By 14 February 2020, 49% (15 February 2019: 82%) of the year-end balance due from this customer had been received in full.

The maximum exposure to credit risk for trade and other receivables at 31 December by geographic areas was:

$ million	2019	2018
China	168	119
Kazakhstan	5	4
Europe	1	4
Other	2	–
	176	127

Of the above, $158 million relates to trade receivables measured at fair value through profit or loss and $18 million is measured at amortised cost (2018: $114 million and $13 million respectively).

(ii) Impairment losses for trade and other receivables measured at amortised cost

The ageing of trade and other receivables measured at amortised cost at 31 December, was:

	2019		2018	
$ million	Gross	Impairment	Gross	Impairment
Not past due	15	–	13	–
Past due 1-90 days	3	–	–	–
Past due 91-180 days	–	–	–	–
Past due 181-270 days	–	–	–	–
More than 270 days	1	(1)	1	(1)
	19	(1)	14	(1)

The movement in the loss allowance in respect of trade and other receivables measured at amortised cost was as follows:

$ million	2019	2018
At 1 January	1	1
Charged to income statement	–	–
At 31 December	1	1

Credit risk related to cash and cash equivalents and current investments

Credit risk relating to the Group's other financial assets, principally cash and cash equivalents and current investments, arises from the potential default of counterparties. Credit risk arising from balances with banks and financial institutions is managed by the Group's Treasury Committee in accordance with a Board approved Treasury Policy. The Group's cash management policies emphasise security and liquidity ahead of investment return. Investments of cash and deposits are made only with approved counterparties of high credit worthiness and within credit limits assigned to each counterparty. Exposures are measured against maximum credit limits assigned to each approved counterparty to ensure credit risk is effectively managed. The limits are set to minimise the concentration of risks and therefore mitigate any financial loss through potential counterparty failure.

In order to manage counterparty and liquidity risk, surplus funds within the Group are held predominantly in the UK and funds remaining in Kazakhstan, Kyrgyzstan and Russia are utilised mainly for working capital purposes. The Group must maintain a level of cash and deposits in Kazakhstan with local branches of international financial institutions and well established local Kazakhstan banks. The surplus funds in the UK are held primarily with major European and US financial institutions with minimum ratings of Standard & Poor's 'A-' and Moody's 'A3' and 'AAA' rated liquidity funds. These limits are reviewed on a regular basis to take account of developments in financial markets and updated accordingly. Expected credit losses take into account the maturities of deposits and changes in observable inputs, such as the spread on credit default swaps, which may indicate changes in the probability of potential default of counterparties. There have been no significant increases in credit risk since initial recognition and possible default events have been considered over a period of 12 months after the reporting date. At 31 December 2019, there were no expected credit losses in respect of cash and cash equivalents and current investments (2018: none).

(g) Liquidity risk

The Group's objective is to maintain a balance between availability of funding and maximising investment return on its liquid resources through the use of liquid cash investments and debt facilities of varying maturities. Management regularly reviews the funding requirements of the Group in selecting appropriate maturities for its liquid cash investments.

The Group's policy is to centralise debt and surplus cash balances to the maximum extent possible.

Maturity of financial liabilities

The table below analyses the Group's financial liabilities, which will be settled on a gross basis, into relevant maturity groups based on the remaining period at the balance sheet date to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

$ million	On demand	Less than 3 months	3 to 12 months	1 to 5 years	More than 5 years	Total
2019						
Borrowings[1]	–	(285)	(472)	(2,174)	(1,359)	(4,290)
Other liabilities	–	–	(4)	(9)	(2)	(15)
Trade and other payables[2]	–	(205)	(8)	(2)	–	(215)
Derivative instrument	–	–	–	(12)	–	(12)
	–	(490)	(484)	(2,197)	(1,361)	(4,532)

$ million	On demand	Less than 3 months	3 to 12 months	1 to 5 years	More than 5 years	Total
2018						
Borrowings[1]	–	(293)	(460)	(2,218)	(1,465)	(4,436)
Other liabilities	–	(44)	(2)	(4)	(4)	(54)
Trade and other payables[2]	–	(140)	–	–	–	(140)
Derivative instrument	–	–	–	(12)	–	(12)
	–	(477)	(462)	(2,234)	(1,469)	(4,642)

1 Borrowings include expected future interest payments based on contracted margins and prevailing LIBOR rates at the balance sheet date.

2 Trade and other payables exclude payments received in advance from customers, other taxes payable and MET and royalties that are not regarded as financial instruments and interest payable which is reflected within borrowings.

(h) Capital management

The over-riding objectives of the Group's capital management policy are to safeguard and support the business as a going concern through the commodity cycle, to maximise returns to shareholders and benefits to other stakeholders and to maintain an optimal capital structure in order to reduce the Group's cost of capital.

Baimskaya is a large-scale project and its development will require additional financing which will increase the debt levels of the Group. The financing requirements of the Baimskaya copper project will be assessed during the feasibility study, following which the Board will further review the Group's allocation of capital. The Group ordinarily seeks to maintain a level of net debt which does not exceed two times 'normalised' EBITDA through the commodity cycle but the Board maintains the flexibility to suspend the ratio to allow for higher gearing during periods of major capital investment, as was the case for the development and ramp up of Aktogay and Bozshakol. This ratio is reviewed in conjunction with market conditions and prevailing commodity prices in order to ensure an efficient capital structure that is balanced against the risks of carrying excessive leverage. The Group does not have a target debt to equity ratio. Included within the current debt facilities are financial covenants related to maximum borrowing levels of the Group (determined by reference to net debt to EBITDA and debt to equity ratios), minimum tangible net worth of individual Group entities and consolidated gross assets to gross liabilities ratios, for which compliance certificates are produced. All financial covenants were fully complied with during the year and up to the date of approval of the financial statements.

At 31 December 2019, total capital employed (which comprises equity holders' funds, non-controlling interests and borrowings) of the Group amounted to $5,474 million, compared to $4,507 million at 31 December 2018. Total capital employed is the measure that is used by the Directors in managing capital. The Group was in a net debt position of $2,759 million (2018: $1,986 million).

34. Commitments and contingencies

(a) Legal claims

In the ordinary course of business, the Group is subject to legal actions and complaints. The Directors believe that the ultimate liability, if any, arising from such actions or complaints will not have a materially adverse effect on the financial condition or results of operations of the Group. As of 31 December 2019 and 2018, the Group was not involved in any significant legal proceedings, including arbitration, which may crystallise a material financial loss for the Group.

(b) Taxation contingencies

(i) Inherent uncertainties in interpreting tax legislation

The Group is subject to uncertainties relating to judgements used in the determination of its tax liabilities and the timing of recovery of tax refunds. Kazakhstan, Kyrgyzstan and Russian tax and customs legislation are in a state of continuous development and therefore are subject to frequent changes and varying interpretations. The Directors' interpretation of tax legislation as applied to the transactions and activities of the Group may not coincide with that of the tax authorities. As a result, the tax authorities may challenge transactions and the Group may be assessed with additional taxes, penalties and fines, or refused refunds, which could have a material adverse effect on the Group's financial performance or position.

(ii) Tax audits

Historical tax years relating to various companies within the Group remain open for inspection during a tax audit. The tax authorities in Kazakhstan are able to raise additional tax assessments for five years after the end of the relevant tax period in respect of all taxes. In Kyrgyzstan, tax authorities are able to raise additional tax assessments for a period of six years after the end of the relevant tax period. In Russia, the tax authorities are able to raise additional tax assessments for a period of three years prior to the year of review. In all three jurisdictions, under certain circumstances, historical tax years may remain open for inspection for longer periods. A number of the Group's operating subsidiaries in Kazakhstan are currently undergoing or expected to undergo routine tax audits which could give rise to substantial tax assessments. As such, additional tax payments could arise for the Group.

(iii) Transfer pricing

The Kazakhstan transfer pricing legislation provides clarity on various aspects of transfer pricing, including the use of LME and LBMA prices as the basis of market prices, quotation periods to be used for the sale and purchase of traded commodities and the acceptability of discounts with reference to LME/LBMA prices when transacting in traded commodities. Notwithstanding these, the Directors have recognised a provision for the amounts that represent the Directors' best estimate of the probable cash payments that will be required to settle any residual transfer pricing exposures based on the Directors' interpretation of the transfer pricing legislation and the prevailing status of discussions with the tax authorities. The risk remains that the tax authorities may take a different position with regard to the interpretation of the transfer pricing legislation, and amendments thereof, and the outcome of discussions with the Kazakhstan tax authorities may be materially different from the Directors' expectations.

(iv) Possible additional tax liabilities

The Directors believe that the Group is in substantial compliance with the tax laws in Kazakhstan, Kyrgyzstan and Russia, and consequently no additional material tax liabilities will arise. However, due to the reasons set out above, the risk remains that the relevant tax authorities may take a differing position with regard to the interpretation of contractual provisions or tax law (inclusive of corporate income taxes, value added tax and subsoil use legislation).

The resulting effect of any positions taken by the tax authorities that differ from those of the Directors is that additional tax liabilities may arise or the timing of refunds due may take longer than expected or may be refused. Therefore it is not practical for the Directors to estimate the financial effect of the timing of tax refunds and of additional tax liabilities, if any, together with any associated penalties and charges for which the Group may be liable that may arise from different interpretations applied by the tax authorities.

The Directors do not believe that there are material uncertain tax positions at 31 December 2019.

(c) Environmental contingencies

Environmental regulations, including emissions legislation, in Kazakhstan and Kyrgyzstan are continually evolving. The outcome of environmental regulations under proposal or any future environmental legislation cannot be reliably estimated. As obligations are determined, they will be provided for in accordance with the Group's accounting policies. The Directors believe that there are no significant liabilities under current legislation not accrued for in the Group's consolidated financial statements, however they recognise that the environmental regulators in Kazakhstan and Kyrgyzstan may take a differing position with regard to the interpretation of environmental legislation. The resulting effect is that additional environmental liabilities may arise, however due to the range of uncertainties, it is not practical for the Directors to estimate any further potential exposures.

The provision that has been made for costs associated with restoration and abandonment of mine sites upon depletion of deposits (see note 28), is based upon the estimation of the Group's specialists or external consultants. Where events occur that change the level of estimated future costs for these activities, the provision will be adjusted accordingly.

(d) Use of subsoil and exploration rights

In Kazakhstan, all subsoil reserves belong to the State, with the Ministry of Investments and Development (the 'Ministry') granting exploration and production rights to third party bodies. Subsoil and exploration rights are not granted in perpetuity and any renewal must be agreed before the expiration of the relevant contract or licence. These rights may be terminated by the Ministry if the Group does not satisfy its contractual obligations. In January 2019, the Ministry approved the extension of the Koksay exploration licence to June 2021.

In Kyrgyzstan, all subsoil reserves belong to the State, with the State Agency for Geology and Mineral Resources of the Kyrgyz Republic (the 'competent body') granting exploration and production rights to third party bodies. Subsoil and exploration rights are not granted in perpetuity and any renewal must be agreed before the expiration of the relevant contract or licence. These rights may be terminated by the competent body if the Company does not satisfy its contractual obligations.

In Russia, all subsoil reserves belong to the State, with the Federal Agency for Mineral Resources ('Rosnedra') granting exploration and production rights to third party bodies. Subsoil and exploration rights are not granted in perpetuity and any renewal must be agreed before the expiration of the relevant contract or licence. These rights may be terminated by Rosnedra if the Group does not satisfy its contractual obligations.

(e) Capital expenditure commitments

The Group has capital expenditure commitments for the purchase of property, plant and equipment as well as commitments under its mining subsoil agreements. The total commitments for property, plant and equipment at 31 December 2019 amounted to $537 million (2018: $724 million). These amounts relate mainly to the Aktogay expansion, the Artemyevsky expansion and the Baimskaya copper project, which reflect contractual commitments, not the minimum cost which would be incurred in the event of delay or cancellation.

(f) Lease commitments

The Group has elected not to recognise right-of-use assets and lease liabilities for leases which have low value, or short-term leases with a duration of 12 months or less. The payments associated with such leases are charged directly to the income statement on a straight-line basis over the lease term. During the year, the expense associated with the Group's short-term contracts for leased assets within the scope of IFRS 16 'Leases', including certain construction related equipment, vehicles and office buildings, as well as the associated commitment for short-term lease contracts at 31 December 2019, was not material.

35. Related party disclosures

(a) Transactions with related parties

Transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note. Details of transactions between the Group and other related parties, including Kazakhmys Holding Group, are disclosed below.

The following table provides the total amount of transactions which have been entered into with related parties for the relevant financial year:

$ million	Sales to related parties	Purchases from related parties	Amounts owed by related parties[1]	Amounts owed to related parties
Kazakhmys Holding Group				
2019	1	113	3	4
2018	4	101	3	2

1 No provision is held against the amounts owed by related parties at 31 December 2019 and 2018.

Kazakhmys Holding Group

The related party transactions and balances with companies which are part of the Kazakhmys Holding Group (a company owned by Vladimir Kim, a Director of the Company, and Eduard Ogay, a former Director of the Company) are provided under two Framework Service Agreements and in accordance with the Relationship Agreements. These include the provision of smelting and refining of the Group's copper concentrate at the Balkhash smelter, electricity supply and certain maintenance functions. Additionally, during 2019 the Group sold the Belousovsky concentrator and the associated site restoration obligation to a subsidiary of the Kazakhmys Holding Group for proceeds of less than $1 million, which resulted in no material gain or loss on disposal.

At 31 December 2019, the Group's joint operation, ICG, held cash and cash equivalents of $3 million (2018: $nil) with Bank RBK JSC (a company majority owned by Vladimir Kim, a Director of the Company). Joint operations are proportionally consolidated such that the Group's share of its cash and cash equivalents are included within the consolidated financial statements (see note 38(b)).

(b) Terms and conditions of transactions with related parties

Prices for related party transactions are determined by the parties on an ongoing basis depending on the nature of the transaction.

(c) Subsidiaries and joint operations

Details of investments in subsidiaries and joint operations are disclosed in note 39(i).

36. Share-based payment plans

The Company's share-based payment plans consist of a Long Term Incentive Plan ('LTIP'), and a Deferred Share Bonus Plan ('DSBP'). The total expense for the year ended 31 December 2019 arising from these plans was $3 million (2018: $3 million). The total number of shares outstanding under these schemes as at 31 December 2019 was 1,609,173 (2018: 2,880,433). The total number of shares exercisable under these schemes as at 31 December 2019 was 344,877 (2018: 852,602).

These plans are discretionary benefits offered by the Company for the benefit of its employees. The main purpose is to increase the interest of the employees in KAZ Minerals long-term business goals and performance through share ownership. They represent incentives for employees' future performance and commitment to be aligned to the goals of the Group. For future awards, the Company may issue new shares or use shares held as treasury by the Company, as approved by shareholders, rather than purchase the shares in the open market through the Employee Benefit Trust.

37. Post balance sheet events

(a) PXF facility

On 28 January 2020, the Group completed an amendment and extension of the PXF which includes an increase in facility commitments to $1.0 billion, an extension of the loan tenor and a reduction in the facility margin. The amendment represents a net increase of $700 million above the $300 million outstanding under the existing facility and the maturity profile is extended by 3.5 years, from June 2021 until December 2024 with two annual extension options which, if exercised, would extend final maturity of the facility to December 2025 or December 2026 respectively. The amended facility accrues interest at a variable margin of between 2.25% and 3.50% above US$ LIBOR (previously between 3.00% and 4.50% above US$ LIBOR), dependent on the ratio of net debt to EBITDA which will be tested semi-annually. Monthly repayments will commence in January 2021, with a final balloon repayment of one-third of the facility amount ($333 million) in December 2024, which will be amortised during 2025 and 2026 if the extension options are exercised. The Group expects to fully draw the facility in the first quarter of 2020.

(b) Dividends

On 19 February 2020, the Directors of the Company recommended a final dividend for the year ended 31 December 2019 of 8.0 USc per share. See note 15(b).

38. Summary of significant accounting policies

The following significant accounting policies have been applied in the preparation of the consolidated financial statements. These accounting policies have been consistently applied across the Group.

(a) Foreign currency translation

The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. Transactions in currencies other than the functional currency are initially recorded at the functional currency rate ruling at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the rate of exchange ruling at the balance sheet date. Exchange gains and losses on settlement of foreign currency transactions translated at the rate prevailing at the date of the transactions, or the translation of monetary assets and liabilities at period end exchange rates, are taken to the income statement. Transactions denominated in foreign currencies and that result in the recognition of non-monetary assets and liabilities are translated to the functional currency at the foreign exchange rate ruling at the date of each transaction.

The functional currency of the Company, the Group's main financing and holding companies and KAZ Minerals Sales Limited is the US dollar as the majority of the operating activities are conducted in US dollars. The functional currency of the Group's Kazakh entities and their UK based project finance companies, as applicable, is the Kazakhstan tenge, with the functional currency of the Group's Russian entities being the Russian rouble, and the Bozymchak functional currency being the Kyrgyz som. On consolidation, income statements of subsidiaries are translated into US dollars, at average rates of exchange. Balance sheet items are translated into US dollars at period end exchange rates. Exchange differences on the retranslation are taken to a separate component of equity.

The following foreign exchange rates against the US dollar have been used in the preparation of the consolidated financial statements:

	31 December 2019		31 December 2018	
	Spot	Average	Spot	Average
Kazakhstan tenge	**381.18**	**382.75**	384.20	344.71
Kyrgyzstan som	**69.64**	**69.79**	69.85	68.84
UK pounds sterling	**0.75**	**0.78**	0.78	0.75
Russian rouble	**61.91**	**64.69**	n/a	n/a

(b) Business combinations and joint operations

The Group applies the purchase method to account for business combinations. On the acquisition of a subsidiary, the purchase consideration is allocated to the identifiable assets, liabilities and contingent liabilities (identifiable net assets) on the basis of fair values at the date of acquisition. Those mining rights, mineral reserves and resources that are able to be reliably valued are recognised in the assessment of fair values on acquisition. Other potential reserves, resources and mineral rights, for which, in the Directors' opinion, values cannot be reliably determined, are not recognised.

The consideration transferred (cost of acquisition) is the aggregate of: (a) the fair values at the date of exchange, of assets transferred, liabilities incurred or assumed, and equity instruments issued by the Group; and (b) the fair value of any asset or liability resulting from a contingent consideration arrangement. Acquisition-related costs are expensed as incurred in the income statement.

When the cost of acquisition exceeds the fair value attributable to the Group's share of the identifiable net assets, the difference is treated as purchased goodwill.

If the fair value attributable to the Group's share of the identifiable net assets exceeds the fair value of the consideration, the Group reassesses whether it has correctly identified and measured the assets acquired and liabilities assumed and recognises any additional assets or liabilities that are identified in that review. If that excess remains after reassessment, the Group recognises the resulting gain in the income statement on the acquisition date.

When a subsidiary is acquired in a number of stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date through the income statement.

Joint operations

A joint arrangement is an arrangement in which two or more parties have joint control. Joint control is the contractually agreed sharing of control such that decisions about the relevant activities of the arrangement (those that significantly affect the Group's returns) require unanimous consent of the parties sharing control. A joint operation is a joint arrangement in which the parties that share joint control have rights to the assets and obligations for the liabilities, relating to the arrangement. This includes situations where the parties benefit from the joint activity through a share of the output, rather than by receiving a share of the results of trading.

Joint operations are proportionally consolidated such that the Group's share of its assets, liabilities, revenue and expenses are included within the consolidated financial statements. On consolidation, transactions and balances, including any profit earned, between the Group and the joint operation are eliminated, to the extent of its interest.

(c) Property, plant and equipment

(i) Initial measurement

Property, plant and equipment is stated at cost less accumulated depreciation and impairment losses. The cost of an item of property, plant and equipment comprises its purchase price and any costs directly attributable to bringing it into working condition for its intended use. The cost of self-constructed assets includes the cost of materials, direct labour and an appropriate proportion of production overheads.

Costs which are necessarily incurred and revenues earned whilst commissioning new assets, in the period before they are capable of operating in the manner intended by management, are capitalised. For mining and processing facility assets, this requires judgement based on the facts and circumstances of the operation and is considered to be when these assets have reached commercial levels of production. Commercial production represents production in reasonable commercial quantities and refers to the level of output and not profit or loss and is generally considered to have been achieved when the operation is consistently operating at over 60% of its intended capacity for a sustained period of around three months.

(ii) Depreciation

The cost of each item of property, plant and equipment is depreciated over its useful life to its estimated residual value. Each item's estimated useful life has due regard to both its own physical life limitations and the present assessment of economically recoverable reserves of the mine property at which the item is located. Estimates of remaining useful lives and residual values are made on a regular basis for all mine buildings, plant and equipment, with annual reassessments for major items. Depreciation is charged to the income statement on a straight-line basis over the estimated useful life of the individual asset to its estimated residual value.

Depreciation commences on the date the assets are ready for use within the business. Freehold land is not depreciated.

The expected useful lives are as follows:

- Buildings 15-40 years
- Plant and equipment 4-25 years
- Other 3-15 years

(iii) Construction in progress

Assets in the course of construction are capitalised as a separate component of property, plant and equipment. On completion, the cost of construction is transferred to the appropriate category.

Construction in progress is not depreciated.

38. Summary of significant accounting policies continued

(c) Property, plant and equipment continued

(iv) Repairs and maintenance

Expenditure incurred to replace a component of an item of property, plant and equipment that is accounted for separately is capitalised with the carrying amount of the replaced component being written off. Repairs and maintenance expenditure, including major overhauls which are infrequent, are capitalised if additional future economic benefits will arise from the expenditure. All other repairs and maintenance expenditure is recognised in the income statement as incurred.

(d) Mining assets

(i) Mineral licences and properties

Costs of acquiring mineral licences and properties are capitalised on the balance sheet in the year in which they are incurred. Costs associated with a start-up period for significant developments are capitalised during the commissioning period (development expenditure) where the asset is incapable of operating at normal levels without a commissioning period. Mineral licences and properties are amortised over the remaining life of the mine using a unit of production method.

The unit of production method is the ratio of commodity production in the period to the estimated quantities of commercial reserves over the life of the mine (using proven and probable mineral reserves as determined by KAZRC/JORC on an annual basis) based on the estimated economically recoverable reserves to which they relate. Changes in estimates, which affect unit of production calculations, are accounted for prospectively.

(ii) Mine development costs

Mine development costs are incurred to obtain access to proved reserves or mineral-bearing ore deposits and to provide facilities for extracting, lifting and storing minerals. Such costs are, upon commencement of production, amortised over the remaining life of the mine using a unit of production method.

(iii) Mine stripping costs

Mine stripping costs incurred in order to access the mineral-bearing ore deposits are deferred prior to the commencement of production. Such costs are amortised over the remaining life of the mine using a unit of production method.

The ongoing mining and development of the open-pit mines is generally performed via a succession of individual phases. The costs of extracting material from an open-pit mine are generally allocated between ore and waste stripping in proportion to the tonnes of waste and ore material extracted (the stripping ratio). The waste stripping costs are generally absorbed into inventory and expensed as that inventory is processed and sold. Where the stripping costs relate to a waste stripping campaign which is expected to provide improved access to an identifiable component of the ore body, the costs of removing waste in order to improve access to that part of the ore body will be capitalised within mining assets. The capitalised costs will then be amortised in a systematic manner over the reserves that directly benefit from the specific stripping activity. Changes to the stripping ratio arising from changes to mine plans or mineral reserves are regarded as changes in estimates and are accounted for prospectively.

(iv) Exploration and evaluation costs

Exploration and evaluation expenditure for each area of interest once the legal right to explore has been acquired, other than that acquired through a purchase transaction, is carried forward as an asset, within mining assets, provided that one of the following conditions is met:

- such costs are expected to be recouped through successful exploration and development of the area of interest or, alternatively, by its sale.
- exploration and evaluation activities in the area of interest have not yet reached a stage which permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in relation to the area are continuing.

Exploration expenditure which fails to meet at least one of the conditions outlined above is written off. Administrative and general expenses relating to exploration and evaluation activities are expensed as incurred.

Identifiable exploration and evaluation assets acquired in a purchase transaction are recognised as assets at their cost, or fair value if purchased as part of a business combination. Exploration assets are reassessed on a regular basis and these costs are carried forward provided that at least one of the conditions outlined above is met.

Exploration and evaluation assets transferred to mine development costs when attributable to producing interests are amortised on a unit of production basis over the remaining life of the associated mine.

(e) Impairment

The carrying values of mining assets including capitalised exploration and evaluation expenditure and property, plant and equipment are assessed for impairment when indicators of such impairment exist. In performing impairment reviews, assets are categorised into the smallest identifiable groups (cash generating units) that generate cash flows independently. If any indication of impairment exists, the estimated recoverable amount of the asset or cash generating unit ('CGU') is calculated.

If the carrying amount of the asset or CGU exceeds its recoverable amount, it is impaired with the loss charged to the income statement so as to reduce the carrying amount to its recoverable amount.

Impairment losses are recognised in the income statement in those expense categories consistent with the function of the impaired asset or CGU.

An assessment is made at each reporting date as to whether there is any indication that previously recognised impairment losses may no longer exist or may have decreased. If such indication exists, the Group makes an estimate of the recoverable amount.

(i) Calculation of recoverable amount

The recoverable amount of an asset or CGU is the greater of its value in use and fair value less costs to sell. In assessing value in use, the estimated future cash flows of the asset or CGU in its present condition are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, consideration will be given to whether the value of the asset or CGU can be determined from an active market (e.g. recognised exchange) or a binding sale agreement which are classified as level 1 in the fair value hierarchy under IFRS 13 '*Fair Value Measurements*'. Where this is not determinable, fair value less costs to sell for a CGU is usually estimated with reference to a discounted cash flow model, similar to the method used for value in use, but may include estimates of future production, revenues, costs and capital expenditure not currently included in the life of mine plan. Additionally, cash flow estimates include the impact of tax and are discounted using a post-tax discount rate. An estimate made on this basis is classified as level 3 in the fair value hierarchy.

(ii) Reversals of impairment

A previously recognised impairment loss is reversed only if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment loss was recognised. If this is the case, the carrying amount of the asset is increased to its recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised for the asset in prior years. Such reversals are recognised in the income statement. Impairment losses recognised in relation to goodwill are not reversed for subsequent increases in the recoverable amount.

(f) Inventories

Inventories are valued at the lower of cost and net realisable value. Cost includes all costs incurred in the normal course of business in bringing each product to its present location and condition. Cost is determined on the following bases:

- Raw materials and consumables are valued at cost on a first-in, first-out (FIFO) basis; and
- Work in progress and finished goods are valued at the cost of production, including the appropriate proportion of depreciation, labour and overheads based on normal operating capacity. The cost of work in progress and finished goods is based on the weighted average cost method.

Net realisable value represents estimated selling price in the ordinary course of business less any further costs expected to be incurred to completion and disposal.

Inventory, usually stockpiled ore that has been extracted, which is not expected to be processed within 12 months of the balance sheet date and is considered to fall outside the normal operating cycle of the operation, is included within non-current assets.

(g) Current investments

Current investments are cash deposits which do not satisfy the criteria of being held to meet short-term commitments and which have original maturities of more than three months but less than 12 months. These deposits are held mainly with major European and US financial institutions with high credit worthiness (minimum 'A-', 'A3' and 'AAA' rated liquidity funds) and within approved credit limits. Current investments are included within the definition of net debt which is a measure used by management and the Group's lenders in assessing compliance with borrowing covenants (see note 32).

(h) Cash and cash equivalents

Cash and cash equivalents, held for the purpose of meeting short-term commitments, comprise cash at bank and in hand, short-term deposits held on call or with original maturities of three months or less and highly liquid investments that are readily convertible into known amounts of cash and which are subject to insignificant risk of changes in value, and bank overdrafts.

38. Summary of significant accounting policies continued

(i) Employee benefits

(i) Long-term employee benefits

The Group's entities located in Kazakhstan remit contributions to State managed pension plans on behalf of its employees. Contributions to be paid by the Group are withheld from employees' salaries based on prescribed rates and are recognised as part of the salary expense in the income statement as incurred.

The Group's defined benefit plans, including the death and disability plans for current and former employees, are accounted for in accordance with IAS 19 '*Employee Benefits (Revised)*', such that the plan liabilities and assets are measured by actuarial valuations using the projected unit credit method.

The future benefit that employees have earned is discounted to determine the present value. The discount rate is determined by reference to the US Treasury bond rate adjusted for country specific inflation and risk. The Treasury bond used approximates the average maturity profile of the Group's benefit obligations. The calculation is performed by a qualified independent actuary on a rotational basis.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise for defined benefit plans not considered to be other long-term employee benefits. In respect of other long-term employee benefit plans, namely the Group's disability benefits obligation, all actuarial gains and losses are recognised in the income statement in the period in which they arise. The expense in relation to all long-term employee benefits is charged to the income statement so as to match the cost of providing these benefits to the period of service of the employees.

(ii) Share-based payments

Certain employees of the Group receive part of their remuneration in the form of share-based payment transactions, whereby employees render services in exchange for shares or rights over shares (equity-settled transactions). The cost of equity-settled transactions with employees is measured at fair value at the date at which they are granted. The fair value of share awards with market-related vesting conditions is determined using the Monte Carlo method and the fair value at the grant date is expensed on a straight-line basis over the vesting period based on the Group's estimate of shares that will eventually vest.

The estimate of the number of awards likely to vest is reviewed at each balance sheet date up to the vesting date at which point the estimate is adjusted to reflect the actual outcome of awards which have vested. No adjustment is made to the fair value after the vesting date even if the awards are forfeited or not exercised.

(j) Own shares

Own equity instruments which are re-acquired either by the Employee Benefit Trust for the purposes of the Group's employee share-based payment plans or by the Company as part of any share buy-back programmes are recognised at cost and deducted from equity. No gain or loss is recognised in the income statement on the purchase, sale, issue or cancellation of the Group's own equity instruments. Any difference between the carrying amount and the consideration paid to acquire such equity instruments is recognised within equity.

(k) Social responsibility costs

The Group contributes towards social programmes for the benefit of the local community at large. The Group's contributions towards these programmes are expensed to the income statement at the point when the Group is committed to the expenditure.

(l) Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, and it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate can be made of the amount. If the effect of the time value of money is material, provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognised as a finance cost.

(i) Site restoration costs

Site restoration provisions are made in respect of the estimated future costs of closure and restoration, and for environmental rehabilitation costs (which include the dismantling and demolition of infrastructure, removal of residual materials and remediation of disturbed areas) in the accounting period when the related environmental disturbance occurs. The provision is discounted where material and the unwinding of the discount is included in finance costs. Over time, the discounted provision is increased for the change in present value based on the discount rates that reflect current market assessments and the risks specific to the liability. At the time of establishing the provision, a corresponding asset is capitalised where it gives rise to a future benefit and depreciated over the remaining life of the mine to which it relates using a unit of production method. The provision is reviewed on an annual basis for changes in cost estimates, discount rates or life of operations. Any change in restoration costs or assumptions will be recognised as additions or charges to the corresponding asset and provision when they occur. For permanently closed sites, changes to estimated costs are recognised immediately in the income statement.

(ii) Other

Other provisions are accounted for when the Group has a legal or constructive obligation for which it is probable there will be an outflow of resources and for which the amount can be reliably estimated.

(m) Revenue

Revenue mainly represents the income arising from the sale of the Group's mineral products and is measured at the transaction price it expects to receive. The Group's products are priced with reference to LME, for copper and zinc, or LBMA, for gold and silver, market prices. The prices achieved for the sale of copper, zinc, gold and silver in concentrate are reduced by contractually determined treatment and refining charges (TC/RCs), which are usually agreed annually in advance and with reference to market rates.

Revenue is recognised when the Group has satisfied its contractual performance obligations to customers, which generally require the delivery of an agreed quantity of a metal product to a specified location. Revenue is recognised as control of the material, including legal title and the risks and rewards of ownership have transferred to the customer, per the contractual delivery Incoterms, and the Group has no other performance obligations. For copper concentrate (including any contained gold and silver by-products), the contractual terms may include an additional performance obligation for the delivery of the material to a specified location, usually a smelter, after control of the product has passed to the customer. For such contractual terms, normally referred to as CIP (Carriage Insurance Paid), the majority of revenue will be recognised when control of the product passes to the customer. Where the revenue attributed to the delivery performance obligation is material, it will be recognised once the concentrate is delivered to the customer.

Most of the sales agreements for the Group's mineral products are provisionally priced, whereby the selling price is subject to final adjustment at the end of a quotation period (typically one to three months), based on the average LME/LBMA market price for the period stipulated in the contract. At each reporting date, provisionally priced metal sales are marked-to-market using forward prices aligned with the quotation period (up to a maximum of two months), with any gains and losses recorded in revenue in the income statement and in trade receivables in the balance sheet.

Copper (including any contained by-products) and zinc concentrates are subject to final volume adjustments based on independent laboratory confirmation of volumes produced, compared to volumes estimated at the time of pricing. Revenue recognised from the sale of copper (including by-products) and zinc concentrate is restricted to the extent that a material reversal in revenue resulting from final volume adjustments will not occur in a subsequent period. In applying the restriction, the Group uses its experience in assessing whether material negative volume adjustments are likely to occur in the next reporting period.

(n) Finance income

Finance income comprises interest income on funds invested. Interest income is recognised as it accrues, calculated in accordance with the effective interest rate method.

(o) Finance costs

Finance costs comprise interest on borrowings which are not capitalised under the borrowing costs accounting policy (see note 38(p) below), and the unwinding of interest costs on provisions.

(p) Borrowing costs

Borrowing costs directly relating to the acquisition, construction or production of a qualifying capital project under construction are capitalised and added to the project cost during construction until such time as the assets are considered substantially ready for their intended use, i.e. when they are capable of commercial production. Where funds are borrowed specifically to finance a project, the amount capitalised represents the actual borrowing costs incurred. Where surplus funds are available for a short period of time from money borrowed specifically to finance a project, the income generated from the temporary investment of such amounts is also capitalised and deducted from the total capitalised borrowing costs. Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the year. All other borrowing costs are recognised in the income statement in the period in which they are incurred using the effective interest rate method.

Borrowing costs that represent avoidable costs not related to the financing arrangements of the development projects and are therefore not directly attributable to the construction of these respective assets are expensed in the period as incurred. These borrowing costs generally arise where the funds are drawn down under the Group's financing facilities, whether specific or general, which are in excess of the near term cash flow requirements of the development projects for which the financing is intended, and the funds are drawn down ahead of any contractual obligation to do so.

38. Summary of significant accounting policies continued

(q) Income tax

Income tax for the year comprises current and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items charged or credited directly to equity, in which case it is recognised in equity.

Current tax expense is the expected tax payable on the taxable income for the year and any adjustment to tax payable in respect of previous years.

Deferred tax is provided using the balance sheet liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The following temporary differences are not provided for:

- those arising on the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither accounting profit nor taxable profit; and
- investments in subsidiaries where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on the tax rates (and tax laws) that have been enacted or substantively enacted at the balance sheet date.

A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised and in combination with other deferred tax assets. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

Deferred tax assets and liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Current and deferred income tax balances are based on the tax legislation in the countries in which the Group operates. Where tax legislation may not be clear or result in uncertainty, the Group will determine its tax obligations and resulting income tax expense using an approach which it believes has a probable chance of being accepted by the tax authorities based on historical experience, legal advice and communication with the tax authorities, where appropriate. Where the Group adopts an approach to an uncertain tax position that it regards as having a less than probable chance of being accepted by the tax authorities, the income tax expense and resulting income and deferred tax balances are adjusted to reflect this uncertainty using either the most likely outcome method or the expected value method.

(r) Dividends

Dividends are recognised as a liability in the period in which they are approved by shareholders. Dividends receivable are recognised when the Group's right to receive payment is established.

(s) Financial instruments

The Group recognises financial assets and liabilities on its balance sheet when it becomes a party to the contractual provisions of the instrument.

(i) Financial assets

Classification and initial measurement

Financial assets within the scope of IFRS 9 are classified as financial assets at amortised cost, fair value through profit or loss or fair value through other comprehensive income. The Group determines this classification at initial recognition depending on the business model for managing the financial asset and the contractual terms of the cash flows.

The Group's financial assets include cash and cash equivalents, current investments, trade and other receivables, long-term bank deposits and derivative financial instruments.

When financial assets are initially recognised, they are measured at fair value being the consideration given or received plus directly attributable transaction costs. Any gain or loss at initial recognition is recognised in the income statement.

The Group's financial assets measured at amortised cost are held for the collection of contractual cash flows where those cash flows have specified dates and represent solely payments of principal and interest, such as cash and cash equivalents, current investments or trade receivables that are not based on listed commodity metal prices or subject to provisional pricing.

The Group's financial assets measured at fair value through profit or loss are those financial assets where the contractual cash flows do not represent solely payments of principal and interest, such as trade receivables which are priced with reference to LME or LBMA prices and are subject to provisional pricing.

Subsequent measurement

Financial assets held for the collection of contractual cash flows that are solely payments of principal and interest (and classified as amortised cost) are subsequently measured at amortised cost using the effective interest rate method ('EIR'). Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance income in the income statement. Allowance for impairment is estimated on a case-by-case basis.

Almost all sales agreements for the Group's mineral products are provisionally priced based on the LME/LBMA market price for the relevant quotation period stipulated in the contract (refer to the revenue accounting policy note 38(m)). At each reporting date, provisionally priced metal sales are marked to market using the relevant forward prices aligned with the quotation period. A gain or loss on a trade receivable which is priced based on listed metal prices, being a financial asset measured at fair value through profit or loss, is recognised within revenue in the income statement in the period in which it arises.

Derecognition
A financial asset is derecognised when the Group loses control over the contractual rights that comprise that asset. This occurs when the rights are realised, expire or are surrendered.

Impairment of financial assets
The Group assesses on a forward-looking basis the expected credit losses that might arise on financial assets measured at amortised cost. This assessment considers the probability of a default event occurring that could result in the expected cash flows due from a counterparty falling short of those contractually agreed.

Expected credit losses are estimated for default events possible over the lifetime of a financial asset measured at amortised cost. However, where the financial asset is not a trade receivable measured at amortised cost and there have been no significant increases in that financial asset's credit risk since initial recognition, expected credit losses are estimated for default events possible within 12 months of the reporting date.

(ii) Financial liabilities

Classification and initial measurement
Financial liabilities within the scope of IFRS 9 are classified as financial liabilities at amortised cost or fair value through profit or loss. The Group determines the classification of its financial liabilities at initial recognition.

The Group's financial liabilities include trade and other payables, other liabilities and borrowings which are classified as amortised cost; and a derivative financial instrument which is classified as fair value through profit or loss. Trade payables may be designated and measured at fair value through profit or loss when doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities on a different basis.

All financial liabilities are recognised initially at fair value while financial liabilities at amortised cost additionally include directly attributable transaction costs.

Subsequent measurement
Trade and other payables, borrowings and other financial liabilities are subsequently measured at amortised cost using the EIR method after initial recognition. Gains and losses are recognised in the income statement through the EIR amortisation process. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in the income statement.

A gain or loss on a financial liability measured at fair value through profit or loss is recognised in the income statement in the period in which it arises.

Where the Group enters into derivative contracts that are not hedging instruments in hedge relationships as defined by IFRS 9, these are carried on the balance sheet at fair value with subsequent changes recognised in finance income or finance costs in the income statement.

Derecognition
A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognised in the income statement.

(iii) Offsetting of financial instruments
Financial assets and financial liabilities are offset and the net amount reported in the balance sheet when there is an enforceable legal right to offset the recognised amounts and there is an intention to settle on a net basis, or to realise the assets and settle the liabilities simultaneously.

(iv) Fair value of financial instruments
At each reporting date, the fair value of financial instruments that are traded in active markets is determined by reference to quoted market prices, without any deduction for transaction costs. For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include using recent arm's length market transactions, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis or other valuation models.

39. Company financial statements

(a) Company balance sheet

$ million	Notes	2019	2018
Assets			
Non-current assets			
Investments	39(d)	**4,193**	4,193
Deferred tax asset		**–**	2
Other non-current assets		**2**	–
		4,195	4,195
Current assets			
Prepayments and other current assets		**2**	1
Intercompany loan	39(e)	**567**	123
Intercompany receivables	39(f)	**13**	6
Cash and cash equivalents		**–**	1
		582	131
Total assets		**4,777**	4,326
Equity and liabilities			
Equity			
Share capital	24(a)	**177**	171
Share premium	5(a)	**2,883**	2,650
Capital reserves	39(g)	**256**	31
Retained earnings		**1,367**	1,385
Total equity		**4,683**	4,237
Non-current liabilities			
Other non-current liabilities		**2**	–
		2	–
Current liabilities			
Trade and other payables		**1**	2
Intercompany payables		**91**	87
		92	89
Total liabilities		**94**	89
Total equity and liabilities		**4,777**	4,326

These financial statements were approved by the Board of Directors on 19 February 2020.

Signed on behalf of the Board of Directors

Andrew Southam
Chief Executive Officer

John Hadfield
Chief Financial Officer

(b) Company statement of changes in equity

$ million	Notes	Share capital	Share premium	Capital reserves[1]	Retained earnings	Total equity
At 1 January 2018		171	2,650	31	1,330	4,182
Total comprehensive income for the year		–	–	–	81	81
Share-based payments		–	–	–	1	1
Dividends paid by the Company	15(a)	–	–	–	(27)	(27)
At 31 December 2018		171	2,650	31	1,385	4,237
Total comprehensive income for the year		–	–	–	27	27
Shares issued and Deferred Consideration arising from acquisition of the Baimskaya copper project	5(a)	6	233	225	–	464
Share-based payments		–	–	–	2	2
Dividends paid by the Company	15(a)	–	–	–	(47)	(47)
At 31 December 2019		177	2,883	256	1,367	4,683

1 See note 39(g) for an analysis of 'Capital reserves'.

(c) Company accounting policies

Basis of preparation

The KAZ Minerals PLC parent company balance sheet, statement of changes in equity and related notes have been prepared in accordance with FRS 101, which applies the recognition and measurement bases of IFRSs as adopted by the EU in accordance with the provisions of the Companies Act 2006 with reduced disclosure requirements. The financial information has been prepared on a historical cost basis. These financial statements have been prepared on a going concern basis (see note 2(a)).

The functional currency of the Company and the presentational currency adopted is US dollars.

In accordance with FRS 101, the following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements:

- Paragraphs 45(b) and 46 to 52 of IFRS 2 '*Share-based Payment*' (details of the number and weighted-average exercise prices of share options and how the fair value of goods or services received was determined)
- IFRS 7 '*Financial Instruments: Disclosures*'
- Paragraphs 91 to 99 of IFRS 13 '*Fair Value Measurement*' (disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities)
- The following paragraphs of IAS 1 '*Presentation of Financial Statements*':
  - 10(d) (statement of cash flows)
  - 10(f) (a statement of financial position at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements)
  - 16 (statement of compliance with all IFRSs)
  - 38A (requirement for minimum of two primary statements, including cash flow statements)
  - 38B-D (additional comparative information)
  - 40A-D (requirements for a third statement of financial position)
  - 111 (cash flow statement information), and
  - 134-136 (capital management disclosures)
- IAS 7 '*Statement of Cash Flows*'
- Paragraph 30 and 31 of IAS 8 '*Accounting Policies, Changes in Accounting Estimates and Errors*' (requirement for the disclosure of information when an entity has not applied a new IFRS that has been issued but is not yet effective)
- Paragraph 17 of IAS 24 '*Related Party Disclosures*' (key management compensation) and
- Requirements in IAS 24 '*Related Party Disclosures*' to disclose related party transactions entered into between two or more members of a group.

As permitted by section 408 of the Companies Act 2006, the profit and loss account of the Company is not presented as part of these financial statements. The profit after tax for the year of the Company amounted to $27 million (2018: $81 million).

Principal accounting policies

The principal accounting policies are consistent with those applied in the consolidated financial statements (see notes 2 and 38) except for the additional accounting policy relating to non-current investments set out below. There were no changes to the non-current investments accounting policy during the year.

39. Company financial statements continued

(c) Company accounting policies continued

Principal accounting policies continued

The preparation of financial statements in conformity with the recognition and measurement bases of IFRSs as adopted by the EU requires the use of estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Although these estimates are based on management's best knowledge of the amount, event or actions, following implementation of these standards, actual results may differ from those estimates.

Non-current investments

Non-current investments are held at cost. The Company assesses investments for impairment whenever events or changes in circumstances indicate that the carrying value of an investment may not be recoverable. If any such indication of impairment exists, the Company makes an estimate of its recoverable amount. Where the carrying amount of an investment exceeds its recoverable amount, the investment is considered impaired and is written down to its recoverable amount. Any positive change in the amount or timing of estimated future cash flows or in the discount rate such that the fair value of the Company's investments increases, consideration will be given to whether previously recognised impairments should be reversed.

(d) Company non-current investments

$ million	2019	2018
Cost		
At 1 January	**7,831**	7,830
Additions	**–**	1
At 31 December	**7,831**	7,831
Provision for impairment		
At 1 January	**3,638**	3,638
Impairment charges	**–**	–
At 31 December	**3,638**	3,638
Net book value	**4,193**	4,193

(i) KAZ Minerals Investments Limited

At 31 December 2019, the Company reviewed the carrying value of its underlying investments to determine whether there were any indicators of impairment. This assessment requires judgement, taking into account the future operational and financial plans of the underlying investment, commodity prices and cost estimates. The Group uses a consistent methodology for impairment indicator reviews across its cash generating units. This methodology did not identify any impairment indicators in respect of the carrying value of the Company's investments and no further impairment review was performed. Additionally, no indicators of impairment reversal were identified. The Company's review included an assessment of its share price in 2019, movements in which were broadly consistent with fluctuations in short-term copper prices and investor sentiment, notably arising from political tensions such as the trade dispute between the USA and China. Management does not consider fluctuations in short-term commodity prices to be an indicator of impairment, given the long life of the Company's assets. Management also monitors a consensus of equity analysts' forecasts for long-term copper price and valuations of the Group's assets and considered that these did not represent an impairment indicator. Changes in the outlook to commodity prices as well as any future changes in mine production plans could impact the recoverable amount of the investment, which is subject to the significant accounting judgments and key sources of estimation uncertainty as disclosed in note 3. In 2018, the reduction in the Company's share price was not found to be driven by fundamental changes to the long-term value of the existing operations.

During 2019, the Company entered into an intercompany transaction with its subsidiary, KAZ Minerals Investments Limited, relating to the settlement of intercompany balances within the Group. The Company subscribed to 691,560 ordinary shares with a nominal value of KZT 1 million per share ($1,800 million at the prevailing date of issue). Following an intercompany dividend by KAZ Minerals Investments Limited, the nominal value of these shares was reduced and redenominated to GBP 1 per share. These intercompany non-cash transactions had no impact on the underlying value of the Company's investments.

(ii) Other companies

The Company holds its interests in other subsidiaries in the Group either directly or via intermediate holding companies for those businesses in Central Asia and Russia.

(e) Company intercompany loans

Intercompany loans receivable include $342 million due from KAZ Minerals Finance PLC (2018: $123 million), which has been advanced by the Company for general corporate purposes and is repayable on demand. Intercompany loans receivable also include $225 million (2018: $nil) due from KAZ Minerals Investments Limited, the intermediate parent company of the entity which holds the Baimskaya mining licence in Russia, relating to the Deferred Consideration for the remaining interest in Baimskaya which is payable by the Company in 21.0 million shares (see note 39(g)(ii)). The loan to KAZ Minerals Finance PLC bears interest at US$ LIBOR minus 0.10%. At 31 December 2019, interest receivable of $12 million (2018: $5 million) had accrued on this loan balance and is included within intercompany receivables (note 39(f)). The advance was considered for impairment under the IFRS 9 expected credit loss method. As the loan is repayable on demand and as KAZ Minerals Finance PLC has the ability to repay this on demand, the expected credit loss was estimated at $nil.

(f) Company intercompany receivables

$ million	2019	2018
Interest receivables	12	5
Other receivables	1	1
	13	6

(g) Company capital reserves

$ million	Capital redemption reserve	Deferred Consideration reserve	Total
At 1 January and 31 December 2018	31	–	31
Deferred Consideration on acquisition of the Baimskaya copper project	–	225	225
At 31 December 2019	**31**	**225**	**256**

(i) Capital redemption reserve

As a result of the share buy-back programme undertaken in 2008 and the re-purchase of KAZ Minerals PLC shares received from the ENRC disposal in 2013, transfers were made from share capital to the capital redemption reserve based on the nominal value of the shares cancelled.

(ii) Deferred Consideration reserve

On 22 January 2019, the Company announced the Initial Completion of the acquisition of the Baimskaya copper project in the Chukotka region of Russia (see note 5(a)), which was acquired by its subsidiary KAZ Minerals Investments Limited. The Deferred Consideration of $225 million represents the purchase price for the remaining interest in Baimskaya and is payable in 21.0 million shares, subject to the achievement of certain Project Delivery Conditions, including a pre-determined level of throughput and development of infrastructure by the Russian state. To the extent these conditions are not met or waived by the Company and therefore not settled in shares, the Deferred Consideration will become payable in cash on 31 March 2029.

The Deferred Consideration has been included within equity as a separate share-based payment reserve, representing the Company's ability to settle this amount through the issue of 21.0 million shares, measured according to the fair value of the asset acquired on Initial Completion. If the Company decides not to waive any outstanding conditions and settle the Deferred Consideration in cash, the cash payment will be accounted for as the repurchase of an equity interest.

(h) Company related party disclosures

Terms and conditions of transactions with related parties

Prices for related party transactions are determined by the parties on an ongoing basis depending on the nature of the transaction.

39. Company financial statements continued

(i) Subsidiaries and joint operations

The consolidated financial statements include the financial statements of the Company and its subsidiaries and joint operations listed in the following table:

	Principal activity	Operating division	Country of incorporation	Share class	Equity interest at 31 December 2019 %	Equity interest at 31 December 2018 %
Aktogay Copper Smelter B.V.	Inactive	Mining Projects	The Netherlands	€1.00 A Class and B Class Ordinary shares	**51.0**[1]	51.0[1]
Aktogay Smelter LLP	Smelting feasibility	Aktogay	Kazakhstan	–	**100.0**[1]	100.0[1]
GDK Baimskaya LLC	Baimskaya exploration licence	Mining Projects (Baimskaya)	Russia	–	**75.0**[1]	–
Industrial Construction Group LLC	Construction	Aktogay	Kazakhstan	–	**49.0**[1]	49.0[1]
KAZ Minerals Aktogay B.V.	Holding company	Aktogay	The Netherlands	€10.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Aktogay Finance Limited	Group project financing company	Corporate Services	England and Wales	US$1.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Aktogay LLC	Copper mining and concentrating	Aktogay	Kazakhstan	–	**100.0**[1]	100.0[1]
KAZ Minerals Aktogay Project Finance Limited	Group project financing company	Corporate Services	England and Wales	US$1.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Baimskaya Holdings Limited	Holding company	Mining Projects (Baimskaya)	Cyprus	€0.01 A Class and B Class Ordinary shares	**75.0**[1]	–
KAZ Minerals Baimskaya Infrastructure LLC	Project management company	Mining Projects (Baimskaya)	Russia	–	**100.0**[1]	–
KAZ Minerals Bozshakol B.V.	Holding company	Bozshakol	The Netherlands	€10.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Bozshakol LLC	Copper mining and concentrating	Bozshakol	Kazakhstan	–	**100.0**[1]	100.0[1]
KAZ Minerals Bozymchak LLC	Copper/gold mining and concentrating	Bozymchak	Kyrgyzstan	–	**100.0**[1]	100.0[1]
KAZ Minerals Copper B.V.	Holding company	East Region	The Netherlands	€10.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Copper Finance Limited[2]	Financing company	Corporate Services	England and Wales	US$1.00 Ordinary shares	**99.9**[1]	99.9[1]
KAZ Minerals Copper Smelter B.V.	Holding company	Mining Projects	The Netherlands	€10.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Finance PLC	Group financing company	Corporate Services	England and Wales	£1.00 Ordinary shares	**100.0**	100.0
KAZ Minerals Fourteen B.V.	Holding company	Corporate Services	The Netherlands	€10.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Gold B.V.	Holding company	Bozymchak	The Netherlands	€10.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Holding B.V.	Holding company	Corporate Services	The Netherlands	€10.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Holdings International B.V.	Holding company	Corporate Services	The Netherlands	€10.00 Ordinary shares	**100.0**[1]	100.0[1]
KAZ Minerals Investments Limited	Holding company	Corporate Services	England and Wales	£1.00 Ordinary shares	**100.0**	100.0
KAZ Minerals Koksay B.V.	Holding company	Mining Projects (Koksay)	The Netherlands	€10.00 Ordinary shares	**80.6**[1]	100.0[1]

	Principal activity	Operating division	Country of incorporation	Share class	Equity interest at 31 December 2019 %	Equity interest at 31 December 2018 %
KAZ Minerals Koksay Holding B.V.	Holding company	Mining Projects (Koksay)	The Netherlands	€10.00 Ordinary shares	100.0[1]	100.0[1]
KAZ Minerals Kupfer B.V.	Holding company	Corporate Services	The Netherlands	€10.00 Ordinary shares	100.0[1]	100.0[1]
KAZ Minerals Management LLP	Management and services company	Corporate Services	Kazakhstan	–	100.0[1]	100.0[1]
KAZ Minerals Marketing and Logistics Limited[2]	Inactive	East Region	Hong Kong	HK$1.00 Ordinary shares	100.0[1]	100.0[1]
KAZ Minerals Mining B.V.	Holding company	Corporate Services	The Netherlands	€10.00 Ordinary shares	100.0[1]	100.0[1]
KAZ Minerals One Limited	Holding company	Corporate Services	England and Wales	£1.00 Ordinary shares	100.0[1]	100.0[1]
KAZ Minerals Projects B.V.	Project management company	Aktogay and Mining Projects	The Netherlands	€10.00 Ordinary shares	100.0[1]	100.0[1]
KAZ Minerals Projects Finance Limited	Group project financing company	Corporate Services	England and Wales	US$1.00 and US$0.65 Ordinary shares	100.0[1]	100.0[1]
KAZ Minerals Russia LLC	Project management company	Mining Projects (Baimskaya)	Russia	–	100.0[1]	–
KAZ Minerals Sales Limited	Sales and logistics	Aktogay, Bozshakol, East Region and Bozymchak	England and Wales	£1.00 Ordinary shares	100.0	100.0
KAZ Minerals Service LLP	Repairs and maintenance service entity	East Region	Kazakhstan	–	100.0[1]	100.0[1]
KAZ Minerals Services Limited	Management and services company	Corporate Services	England and Wales	£1.00 Ordinary shares	100.0	100.0
KM Trading LLP	Kazakhstan sales company	Aktogay, Bozshakol, East Region and Bozymchak	Kazakhstan	–	100.0[1]	100.0[1]
Konsolidirovannaya Stroitelnaya Gornorudnaya Kompaniya LLP	Koksay exploration licence	Mining Projects (Koksay)	Kazakhstan	–	80.6[1]	100.0[1]
Kytco B.V.	Holding company	Bozymchak	The Netherlands	€100.00 Ordinary shares	100.0[1]	100.0[1]
Regional Mining Company LLC[2]	Project management company	Mining Projects (Baimskaya)	Russia	–	75.0[1]	–
VCM Invest LLC	Holding company	East Region	Kazakhstan	–	99.9[1]	99.9[1]
Vostokenergo LLC	Utility company (heat, water, electricity supply and distribution)	East Region	Kazakhstan	–	99.9[1]	99.9[1]
Vostoktsvetmet LLC	Copper mining and concentrating	East Region	Kazakhstan	–	99.9[1]	99.9[1]

1 Indirectly held by the Company.
2 In the process of deregistration or liquidation.

All companies in the above list incorporated in England and Wales have their registered address at 6th Floor, Cardinal Place, 100 Victoria Street, London SW1E 5JL, United Kingdom.

All companies in the list incorporated in the Netherlands have their registered address at Strawinskylaan 453, 1077XX, Amsterdam, The Netherlands.

39. Company financial statements continued

(i) Subsidiaries and joint operations continued

KAZ Minerals Aktogay LLC, KAZ Minerals Management LLP, KM Trading LLP and Konsolidirovannaya Stroitelnaya Gornorudnaya Kompaniya LLC have their registered office at Building 8, Zhamal Omarova Street, Almaty, 050020, Kazakhstan.

The following entities and their registered office are as follows:

- Aktogay Smelter LLP, 142 Bogenbay Batyr Street, Almaty, 050000, Kazakhstan.
- GDK Baimskaya LLC, 1 Dezhneva Street, Anadyr, Chukotka Autonomus Okrug, 689000, Russia.
- Industrial Construction Group LLC, 159 Chokan Valikhanov Street, Zharkent, Almaty oblast, Panfilovsky district, 041300, Kazakhstan.
- KAZ Minerals Baimskaya Holdings Limited, 5th Floor, Kaimakliotis Building, 59 Griva Digeni, Larnaca, 6043, Cyprus.
- KAZ Minerals Baimskaya Infrastructure LLC, KAZ Minerals Russia LLC and Regional Mining Company LLC, 1st Floor, 4/1 Sadovnicheskaya Street, Moscow, 115035, Russia.
- KAZ Minerals Bozshakol LLC, Building 13, Tortkuduk village, Tort-Kudukskiy village region, Ekibastuz city, Pavlodar oblast, 141218, Kazakhstan.
- KAZ Minerals Bozymchak LLC, 109 K. Akiev Street, Bishkek, 720010, Kyrgyzstan.
- KAZ Minerals Marketing and Logistics Limited, Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong.
- KAZ Minerals Service LLP, Office 34, 9 Pobedy Avenue, Ust-Kamenogorsk city, East-Kazakhstan oblast, 070004, Kazakhstan.
- Vostokenergo LLC, 81/2 Kazakhstan Street, Ust-Kamenogorsk, East-Kazakhstan oblast, 070019, Kazakhstan.
- Vostoktsvetmet LLC and VCM Invest LLC, 121 Protozanov Street, Ust-Kamenogorsk city, East-Kazakhstan oblast, 070004, Kazakhstan.

(j) Guarantees

The Company is the guarantor for the following:

- the $600 million PXF debt facility (together with Vostoktsvetmet LLC and KAZ Minerals Sales Limited) (see note 26), subsequently increased to a $1.0 billion facility (see note 37(a));
- the CDB-Bozshakol and Bozymchak finance facilities totalling $1.5 billion (see note 26);
- the CDB-Aktogay finance facilities totalling $1.5 billion for the Aktogay project (see note 26);
- the $300 million DBK-Aktogay facility (see note 26);
- the $600 million DBK-Aktogay expansion facility (see note 26);
- the $100 million CAT facility (see note 26); and
- the operating lease on the Company's office in London.

(k) Subsequent events

On 19 February 2020, the Directors of the Company recommended a final dividend for the year ended 31 December 2019 of 8.0 USc per share which will be payable to shareholders on 22 May 2020. The estimated total amount of the final dividend payment is $38 million.

$ million (unless otherwise stated)	2019	2018	2017	2016	2015
Results					
Revenues	**2,266**	2,162	1,663	766	665
Profit before finance items and tax	**923**	851	715	218	90
Profit before tax	**726**	642	580	220	12
Profit/(loss) after tax	**571**	510	447	177	(12)
Profit/(loss) attributable to equity holders	**571**	510	447	177	(12)
Assets employed					
Non-current assets	**4,596**	2,897	3,215	3,536	2,715
Current assets	**1,470**	2,143	2,407	1,521	1,443
Non-current liabilities	**(2,966)**	(3,067)	(3,617)	(3,866)	(3,263)
Current liabilities	**(926)**	(919)	(1,007)	(655)	(573)
Net assets	**2,174**	1,054	998	536	322
Financed by					
Equity	**2,115**	1,050	995	533	319
Minority interests	**59**	4	3	3	3
	2,174	1,054	998	536	322
Key statistics					
EBITDA[1]	**1,355**	1,310	1,038	351	202
Underlying Profit/(Loss)[1]	**571**	530	476	180	(10)
Free Cash Flow[1]	**411**	585	452	(60)	(145)
Free Cash Flow excluding interest payments	**641**	814	674	119	2
Ordinary EPS – basic ($)	**1.21**	1.14	1.00	0.40	(0.03)
EPS based on Underlying Profit/(Loss)[1] – basic ($)	**1.21**	1.18	1.07	0.40	(0.02)
Dividends per share (US cents) – paid	**10.0**	6.0	–	–	–
Maintenance spend per tonne of copper produced[1,2] ($/t)	**456**	288	263	662	789

1 Alternative Performance Measures (APMs) are used to assess the performance of the Group and are not defined or specified under IFRS. For further information on APMs, including justification for their use, please refer to the APMs section on page 184.

2 Comparatives for 2015 and 2016 have been restated to reflect the new definition of copper production used from 2017.

1. Summary of significant production and sales figures

kt (unless otherwise stated)	2019	2018
Ore mined	**94,706**	76,525
Ore processed	**58,491**	53,250
Copper content in ore processed (%)	**0.60**	0.63
Copper production[1]	**311.4**	294.7
Copper sales	**317**	296
Gold production (koz)[2]	**201.5**	183.4
Silver production (koz)[2]	**3,382**	3,511
Zinc in concentrate production	**38.3**	49.7

1 Payable metal in concentrate and copper cathodes from Aktogay oxide ore.

2 Payable metal in concentrate.

2. Copper processing

(a) Concentrating

	Ore processed		Copper grade		Copper concentrate produced		Copper in concentrate	
	2019 kt	2018 kt	**2019** %	2018 %	**2019** kt	2018 kt	**2019** %	2018 %
Aktogay								
Aktogay – sulphide	**25,230**	20,766	**0.58**	0.61	**549.7**	505.1	**23.4**	21.9
Bozshakol								
Bozshakol – sulphide	**25,147**	23,704	**0.48**	0.47	**461.6**	416.1	**22.0**	22.3
Bozshakol – clay	**4,323**	4,750	**0.51**	0.50	**71.9**	74.3	**18.9**	18.4
	29,470	28,454	**0.48**	0.48	**533.5**	490.4	**21.6**	21.7
East Region and Bozymchak								
Orlovsky	**969**	1,087	**3.05**	3.24	**142.0**	172.9	**18.9**	18.3
Nikolayevsky	**1,307**	1,404	**1.54**	1.53	**80.2**	86.8	**23.3**	22.5
Belousovsky	**491**	537	**1.38**	1.41	**32.2**	34.6	**18.2**	19.0
Bozymchak	**1,024**	1,002	**0.82**	0.86	**31.2**	33.1	**23.6**	22.9
	3,791	4,030	**1.71**	1.81	**285.6**	327.4	**20.6**	20.0
Total	**58,491**	53,250	**0.60**	0.63	**1,368.8**	1,322.9	**22.1**	21.3

(b) Heap leaching

	Ore to leach pad		Copper grade	
	2019 kt	2018 kt	**2019** %	2018 %
Aktogay	**19,284**	16,104	**0.32**	0.33

3. Production

	Copper[1]		Gold[2]		Silver[2]		Zinc	
	2019 kt	2018 kt	**2019 koz**	2018 koz	**2019 koz**	2018 koz	**2019 kt**	2018 kt
Aktogay – oxide	**22.7**	25.7	**–**	–	**–**	–	**–**	–
Aktogay – sulphide	**123.0**	105.7	**3.0**	0.6	**555**	489	**–**	–
Bozshakol	**110.2**	101.6	**144.8**	127.8	**803**	666	**–**	–
East Region	**48.5**	54.5	**12.9**	15.3	**1,761**	2,114	**38.3**	49.7
Bozymchak	**7.0**	7.2	**40.8**	39.7	**263**	242	**–**	–
Total	**311.4**	294.7	**201.5**	183.4	**3,382**	3,511	**38.3**	49.7

1 Payable metal in concentrate and copper cathodes from Aktogay oxide ore.

2 Payable metal in concentrate.

4. Tolled production

	Copper cathode		Gold bar		Silver bar	
	2019 kt	2018 kt	**2019 koz**	2018 koz	**2019 koz**	2018 koz
Aktogay – sulphide	**39.8**	5.4	**2.8**	–	**173**	18
Bozshakol	**10.1**	10.2	**15.1**	15.2	**76**	83
East Region	**52.4**	57.1	**15.2**	14.7	**1,978**	2,233
Bozymchak	**7.2**	7.5	**42.5**	39.2	**265**	239
Total	**109.5**	80.2	**75.6**	69.1	**2,492**	2,573

5. Other production

	2019 kt	2018 kt
Acid	**409.5**	364.3
Lead dust	**3.1**	2.5
Molybdenum	**0.3**	0.1

6. Sales

	2019		2018	
kt (unless otherwise stated)	**kt**	**$ million**	kt	$ million
Copper cathodes	**138**	**828**	106	690
Copper in concentrate[1]	**179**	**996**	190	1,087
Gold bar (koz)	**97**	**133**	54	68
Gold in concentrate (koz)[1]	**128**	**185**	115	144
Silver bar (koz)	**2,460**	**40**	2,518	40
Silver in concentrate (koz)[1]	**1,106**	**19**	1,009	15
Zinc in concentrate	**38**	**58**	50	101

1 Payable metal in concentrate sold.

7. Average realised prices

	2019	2018
Copper cathodes ($/t)	**6,027**	6,531
Copper in concentrate ($/t)	**5,551**	5,709
Gold bar ($/oz)	**1,374**	1,265
Gold in concentrate ($/oz)	**1,443**	1,258
Silver bar ($/oz)	**16.2**	15.7
Silver in concentrate ($/oz)	**16.7**	15.3
Zinc in concentrate ($/t)	**1,548**	2,015

Alternative Performance Measures

Alternative Performance Measures (APMs) are measures of financial performance, financial position or cash flows that are not defined or specified under IFRS. APMs are used by the Directors internally to assess the performance of the Group and assist in providing relevant and useful information to users of the Annual Report and Accounts.

APMs are not uniformly defined by all companies, including those in the Group's industry. APMs used by the Group may not be comparable with similarly titled measures and disclosures made by other companies. APMs should be considered in addition to and not as a substitute for measures of financial performance, financial position or cash flows reported in accordance with IFRS.

The Group uses APMs to improve the comparability of information between reporting periods and segments, either by adjusting for special items which impact upon IFRS measures or by aggregating or disaggregating IFRS measures, to aid understanding of the Group's performance. The definition and relevance of the APMs used by the Group is set out below, which are consistent with the previous reporting period.

(a) EBITDA

EBITDA is defined as earnings before interest, taxation, depreciation, depletion, amortisation, MET and royalties and special items[1]. EBITDA is a key non-IFRS measure that the Directors use internally to assess the performance of the Group's segments and is viewed as relevant to capital intensive industries with long life assets. The Directors believe that the exclusion of MET and royalties provides an informed measure of the operational profitability given the nature of the taxes, as further explained in the 'Taxation' section on page 43. Special items are excluded to enhance the comparability of EBITDA and certain other APMs from period to period. This performance measure is one of the Group's KPIs, the relevance of which is shown on page 28. A reconciliation to operating profit is provided in note 4(a)(i) to the consolidated financial statements.

(b) Underlying Profit

Underlying Profit is defined as profit/loss excluding special items[1] and their resulting tax and non-controlling interest effects. This measure is considered to be useful as it provides an indication of the profit resulting from the underlying trading performance of the Group. Underlying Profit is reconciled from net profit attributable to equity holders of the Company on page 43 and as set out in note 14 to the consolidated financial statements.

(c) EPS based on Underlying Profit

EPS based on Underlying Profit is profit/loss excluding special items[1] and their resulting tax and non-controlling interest effects, divided by the weighted average number of ordinary shares in issue during the period (see note 14 to the consolidated financial statements). This is one of the Group's KPIs for measuring financial performance, the relevance of which is outlined on page 28. A calculation of EPS based on Underlying Profit is included within note 14 to the consolidated financial statements.

(d) Gross liquid funds

Gross liquid funds is defined as the aggregate of cash and cash equivalents and current investments less restricted cash.

$ million	2019	2018
Cash and cash equivalents	541	1,219
Current investments	–	250
Less: restricted cash	–	(2)
Gross liquid funds	541	1,467

(e) Net debt

Net debt is the excess of current and non-current borrowings over gross liquid funds. The Board uses this measure for the purposes of capital management, which is further described in note 33(h). A reconciliation of net debt is included on page 44 and in note 32 to the consolidated financial statements.

(f) Free Cash Flow

Free Cash Flow is net cash flow from operating activities, as reflected in the consolidated statement of cash flows on page 130, before capital expenditure and VAT associated with major growth projects less sustaining capital expenditure. This is one of the Group's KPIs for measuring financial performance, the relevance of which is outlined on page 28. A reconciliation from net cash flows from operating activities is provided below.

$ million	2019	2018
Net cash flows from operating activities	512	673
Net VAT paid/(received) associated with major growth projects	41	(3)
Less: sustaining capital expenditure	(142)	(85)
Free Cash Flow	411	585

1 Special items are defined as those items which are non-recurring or variable in nature and do not impact the underlying trading performance of the Group. In 2019, there were no special items (2018: $20 million). Special items are identified in note 8 to the consolidated financial statements.

(g) Gross cash costs

Gross cash costs is defined as cash operating costs, including pre-commercial production costs, excluding purchased cathode plus TC/RC on concentrate sales, divided by the volume of own copper sales. Cash costs are a standard industry measure applied by most major copper mining companies. The Directors use gross cash costs to measure the performance of the Group in managing its costs. A reconciliation from revenues is shown below.

$ million (unless otherwise stated)	2019	2018
Revenues	**2,266**	2,162
Less: EBITDA – see note 4(a)(i)	**(1,355)**	(1,310)
Cash operating costs	**911**	852
Less: cash operating costs excluded from gross cash costs (including corporate)	**(37)**	(28)
Add: TC/RC on concentrate sales	**104**	115
Gross cash costs	**978**	939
Own copper sales (kt)	**316.9**	296.1
Gross cash costs ($/t)	**3,086**	3,171
Gross cash costs (USc/lb)	**140**	144

(h) Net cash costs

Net cash costs is defined as gross cash costs less by-product revenues, divided by the volume of own copper sales. This is one of the Group's KPIs for measuring cost performance, the relevance of which is outlined on page 29. A reconciliation from gross cash costs is shown below.

$ million (unless otherwise stated)	2019	2018
Gross cash costs – see note (g) above	**978**	939
Less: by-product revenues – see note 4(b), excluding tolling revenues	**(442)**	(381)
Net cash costs	**536**	558
Own copper sales (kt)	**316.9**	296.1
Net cash costs ($/t)	**1,691**	1,884
Net cash costs (USc/lb)	**77**	85

(i) Maintenance spend per tonne of copper produced

Maintenance spend per tonne of copper produced is defined as sustaining capital expenditure, divided by copper production volumes. This is one of the Group's KPIs for measuring the efficiency of controlling sustaining capital expenditure, the relevance of which is outlined on page 29. A reconciliation from capital expenditure included within the consolidated statement of cash flows is shown below.

$ million (unless otherwise stated)	2019	2018
Purchase of intangible assets – cash flow statement	**1**	2
Purchase of property, plant and equipment – cash flow statement	**737**	567
Investments in mining assets – cash flow statement	**122**	46
Less: expansionary and new project capital expenditure – see Financial review	**(718)**	(530)
Sustaining capital expenditure	**142**	85
Copper production (kt)	**311.4**	294.7
Maintenance spend per tonne of copper produced ($/t)	**456**	288

Mineral Reserves and Mineral Resources estimation methods

The annual review of Mineral Resources and Mineral Reserves is mainly focused on mine reserve reports, depletion through production, analysis of company plans, new exploration results, new technical reports and other changes affecting the Mineral Resources and Mineral Reserves.

Kazakhstan inherited the classification system and estimation methods for minerals that were established in the Former Soviet Union (FSU). Updated "Regulations for the Classification of Non-ferrous Metals Reserves" became law in Kazakhstan in 2006. In practice, this means that the statements of resources and reserves developed by KAZ Minerals (and the mining plans to which they relate) must be submitted for approval to the corresponding committees of the Ministry for Investment and Development, for which adherence to the standardised national system of resource and reserve estimation is mandatory.

Mineral deposits are classified according to their degree of geological complexity into one of three deposit categories (for copper deposits), which determine the density of exploration sampling and the proportions and classifications of the State Commission on Mineral Reserves (GKZ) reserves that must be estimated. As part of the exploitation licence for each mineral deposit, a set of "Conditions for Estimation of Reserves" are prepared by a Kazakhstan licenced design institute and submitted for approval to the State. The Conditions for each deposit specify the minimum thickness for exploitation of the orebody and cut-off grades, plus special considerations which may apply where the conditions for mineral extraction are exceptional or present difficulties.

For the operating mines in the East Region and Kyrgyzstan, a review has been made of the reserves statements of KAZ Minerals and they are presented in accordance with the criteria to meet KAZRC standards. Guidelines on the "Alignment of Kazakh minerals reporting standards and the CRIRSCO Template" were published during 2015 as a joint initiative of the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) and the Kazakh Committee of Geology and Subsoil Use and State Reserves Committee. The guidelines have been used to align categories of reserves (B, C1 and C2) with appropriate, internationally recognised, Mineral Resource categories (Measured, Indicated and Inferred). The Competent Person, however, remains responsible for any estimate that is reported.

Mineral Resources, by definition, must have reasonable prospects for eventual economic extraction. In general, therefore, the total active balance reserve, where no unresolvable problems are foreseen, is considered as the Mineral Resource. Balanced reserves in categories B and C1 are assigned to Measured Mineral Resource and C2 category is assigned to Indicated Mineral Resource. Mineral Reserves in Proved and Probable categories are then converted from the Resources, after consideration of mining plans and after the application of appropriate modifying factors for loss and dilution. Legal approval for the exploitation of a particular reserve block is also taken into consideration.

For the Company's new mining operations at Aktogay and Bozshakol, and the development projects at Koksay and Baimskaya, the assessment of Mineral Resources and Mineral Reserves is based on computer modelling and estimated in accordance with the guidelines of KAZRC/JORC. Each of these projects is being developed following international best practice, which includes the creation of a computerised geological model linked to an electronic database. GKZ estimates of tonnage and metal content will continue to be undertaken to comply with national Kazakhstan requirements.

The Koksay deposit and the Peschanka deposit in the Baimskaya licence area have Mineral Resources based on estimates undertaken by third part consultants. The Competent Persons for these projects are employees of the respective consulting companies and their consent for the disclosure of the estimates for which they are responsible is shown at the end of the report.

Stockpiling of mined ore is common practice at large open pit mines, usually as a means of providing a consistent tonnage and grade feed to the processing plant. Stockpiled ore is included in the inventory of Mineral Reserves and Mineral Resources, but reference is made to the quantity of material held in stockpile at year end. In the case of mined ore added to a heap leach pad, this is considered as "in process" and hence is not included in the Mineral Reserve and Mineral Resource Statement.

The assessment of Inferred Resources for KAZ Minerals is incomplete. The mines do not keep records of 'prognosticated reserves' (as defined in Kazakhstan), categories P1, P2 and P3 under GKZ, which may include material that could be considered equivalent to the KAZRC category of Inferred Resources. Inferred Resources are shown in the tabulations for Aktogay, Bozshakol, Koksay and Peschanka where model-based estimates have been used and Inferred Resources have been categorised as such by a Competent Person under the KAZRC/JORC.

All Mineral Reserves quoted in the following tables are discounted for ore losses and dilution and refer to estimates of tonnes and contained metal grades at the point of delivery to the processing plant. Tonnage figures refer to dry metric tonnes.

Mineral Resources are reported inclusive of Mineral Reserves, but not discounted for loss and dilution.

Summary of Mineral Reserves

		Reserves[1] Mt		Copper %		Gold g/t		Silver g/t		Zinc %		Lead %		Molybdenum %	
		2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Artemyevsky[2]	Proved	**8.9**	13.4	**2.00**	2.17	**0.76**	1.24	**57**	108	**2.92**	5.33	**1.03**	1.72	**–**	–
	Probable	**12.7**	7.7	**1.58**	1.16	**0.85**	0.33	**85**	37	**4.14**	1.63	**1.32**	0.53	**–**	–
	Total	**21.6**	21.1	**1.75**	1.80	**0.82**	0.91	**74**	82	**3.64**	3.97	**1.20**	1.29	**–**	–
Irtyshky[2]	Proved	**3.0**	3.8	**1.48**	1.61	**0.26**	0.29	**64**	67	**3.69**	4.09	**0.50**	0.55	**–**	–
	Probable	**0.9**	0.1	**2.25**	1.02	**0.34**	0.22	**75**	33	**4.51**	1.48	**0.57**	0.26	**–**	–
	Total	**3.9**	3.9	**1.66**	1.60	**0.28**	0.29	**67**	67	**3.89**	4.05	**0.51**	0.55	**–**	–
Orlovsky[2]	Proved	**3.0**	6.7	**2.36**	3.47	**1.07**	0.74	**57**	46	**7.30**	5.03	**1.60**	1.04	**–**	–
	Probable	**3.5**	0.8	**3.77**	5.30	**0.48**	0.90	**30**	33	**2.37**	2.32	**0.56**	0.82	**–**	–
	Total	**6.5**	7.5	**3.11**	3.66	**0.75**	0.76	**43**	45	**4.66**	4.74	**1.04**	1.02	**–**	–
Total East Region[2]	**Proved**	**14.9**	23.9	**1.97**	2.45	**0.72**	0.95	**59**	84	**3.96**	5.05	**1.04**	1.34	**–**	–
	Probable	**17.1**	8.6	**2.06**	1.55	**0.75**	0.38	**73**	37	**3.80**	1.69	**1.13**	0.56	**–**	–
	Total	**32.0**	32.5	**2.02**	2.21	**0.74**	0.80	**66**	72	**3.87**	4.16	**1.08**	1.14	**–**	–
Bozymchak	Proved	**7.4**	8.1	**0.73**	0.72	**1.20**	1.20	**7.4**	7.6	**–**	–	**–**	–	**–**	–
	Probable	**4.3**	4.9	**0.70**	0.71	**1.05**	1.09	**6.0**	6.5	**–**	–	**–**	–	**–**	–
	Total	**11.7**	13.0	**0.72**	0.71	**1.15**	1.16	**6.9**	7.2	**–**	–	**–**	–	**–**	–
Aktogay Sulphide[3, 4]	Proved	**727.8**	729.2	**0.33**	0.34	**–**	–	**–**	–	**–**	–	**–**	–	**0.007**	0.007
	Probable	**628.5**	628.0	**0.34**	0.34	**–**	–	**–**	–	**–**	–	**–**	–	**0.008**	0.008
	Total	**1,356.3**	1,357.2	**0.33**	0.34	**–**	–	**–**	–	**–**	–	**–**	–	**0.007**	0.007
Aktogay oxide	Proved	**42.5**	68.8	**0.39**	0.36	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–
	Probable	**0.2**	0.9	**0.25**	0.29	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–
	Total	**42.7**	69.7	**0.39**	0.36	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–
Total Aktogay[3, 4]	**Proved**	**770.3**	798.0	**0.33**	0.34	**–**	–	**–**	–	**–**	–	**–**	–	**0.007**	0.006
	Probable	**628.7**	628.9	**0.34**	0.34	**–**	–	**–**	–	**–**	–	**–**	–	**0.008**	0.008
	Total	**1,399.0**	1,426.9	**0.34**	0.34	**–**	–	**–**	–	**–**	–	**–**	–	**0.007**	0.007
Bozshakol sulphide[4]	Proved	**446.8**	279.5	**0.35**	0.40	**0.14**	0.18	**1.1**	1.3	**–**	–	**–**	–	**0.008**	0.007
	Probable	**306.7**	177.8	**0.35**	0.37	**0.13**	0.17	**1.0**	1.3	**–**	–	**–**	–	**0.009**	0.008
	Total	**753.5**	457.3	**0.35**	0.39	**0.14**	0.18	**1.1**	1.3	**–**	–	**–**	–	**0.008**	0.007
Bozshakol clay[4]	Proved	**109.8**	89.1	**0.42**	0.46	**0.19**	0.22	**1.2**	1.3	**–**	–	**–**	–	**0.006**	0.006
	Probable	**0.8**	0.6	**0.38**	0.54	**0.23**	0.24	**1.3**	1.9	**–**	–	**–**	–	**0.004**	0.004
	Total	**110.6**	89.7	**0.42**	0.46	**0.19**	0.22	**1.2**	1.3	**–**	–	**–**	–	**0.006**	0.006
Total Bozshakol[4]	**Proved**	**556.6**	368.6	**0.36**	0.41	**0.15**	0.19	**1.1**	1.3	**–**	–	**–**	–	**0.007**	0.007
	Probable	**307.5**	178.4	**0.35**	0.37	**0.13**	0.17	**1.0**	1.3	**–**	–	**–**	–	**0.009**	0.008
	Total	**864.1**	547.0	**0.36**	0.40	**0.14**	0.18	**1.1**	1.3	**–**	–	**–**	–	**0.008**	0.007
Total KAZ Minerals	**Proved**	**1,349.2**	1,198.6	**0.36**	0.41	**0.08**	0.09	**1.1**	2.1	**0.04**	0.10	**0.01**	0.03	**0.007**	0.006
	Probable	**957.6**	820.8	**0.38**	0.36	**0.06**	0.05	**1.7**	0.7	**0.07**	0.02	**0.02**	0.01	**0.008**	0.008
	Total	**2,306.8**	2,019.4	**0.37**	0.39	**0.07**	0.07	**1.4**	1.6	**0.05**	0.07	**0.02**	0.02	**0.007**	0.007

1 Includes allowance for ore loss and dilution. Reserves = Resources – ore loss + dilution.

2 East Region zinc, lead, gold and silver grades shown in the Proved Reserve are estimated only to the Probable Reserve confidence level.

3 The Aktogay molybdenum grade shown in the Proved Reserve is estimated to the Probable Reserve confidence level.

4 Proved Reserves include stockpiled material.

Summary of Mineral Resources

		Resources[1]		Copper		Gold		Silver		Zinc		Lead		Molybdenum	
		Mt		%		g/t		g/t		%		%		%	
		2019	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018	**2019**	2018
Artemyevsky[2]	Measured	**8.9**	12.7	**2.26**	2.47	**0.83**	1.41	**63**	123	**3.25**	6.07	**1.14**	1.96	**–**	–
	Indicated	**12.4**	7.3	**1.76**	1.32	**0.95**	0.38	**94**	43	**4.59**	1.86	**1.46**	0.61	**–**	–
	Total	**21.3**	20.0	**1.96**	2.05	**0.90**	1.03	**81**	94	**4.03**	4.53	**1.33**	1.47	**–**	–
Irtyshsky[2]	Measured	**2.4**	3.8	**2.02**	2.26	**0.35**	0.38	**87**	92	**5.02**	5.30	**0.68**	0.71	**–**	–
	Indicated	**0.8**	0.1	**3.02**	1.60	**0.46**	0.34	**100**	51	**6.05**	2.32	**0.76**	0.40	**–**	–
	Total	**3.2**	3.9	**2.25**	2.25	**0.38**	0.38	**90**	92	**5.27**	5.28	**0.70**	0.71	**–**	–
Orlovsky[2]	Measured	**4.2**	9.3	**2.40**	3.39	**1.14**	0.90	**62**	53	**7.32**	5.20	**1.71**	1.31	**–**	–
	Indicated	**5.9**	2.5	**3.22**	2.91	**0.54**	0.71	**26**	22	**2.39**	2.10	**0.55**	0.61	**–**	–
	Total	**10.1**	11.8	**2.88**	3.29	**0.79**	0.86	**41**	46	**4.43**	4.53	**1.03**	1.16	**–**	–
Total East Region[2]	**Measured**	**15.5**	25.8	**2.26**	2.77	**0.84**	1.07	**66**	93	**4.62**	5.64	**1.22**	1.54	**–**	–
	Indicated	**19.1**	9.9	**2.26**	1.73	**0.80**	0.46	**73**	37	**3.97**	1.92	**1.15**	0.61	**–**	–
	Total	**34.6**	35.7	**2.26**	2.48	**0.82**	0.90	**70**	78	**4.26**	4.61	**1.18**	1.28	**–**	–
Bozymchak	Measured	**8.7**	9.4	**0.79**	0.78	**1.35**	1.35	**8.4**	8.6	**–**	–	**–**	–	**–**	–
	Indicated	**4.9**	5.4	**0.76**	0.77	**1.21**	1.25	**7.1**	7.6	**–**	–	**–**	–	**–**	–
	Total	**13.6**	14.8	**0.78**	0.78	**1.30**	1.31	**7.9**	8.2	**–**	–	**–**	–	**–**	–
Aktogay sulphide[3, 4]	Measured	**772.4**	773.8	**0.33**	0.33	**–**	–	**–**	–	**–**	–	**–**	–	**0.008**	0.008
	Indicated	**784.8**	784.3	**0.32**	0.32	**–**	–	**–**	–	**–**	–	**–**	–	**0.008**	0.008
	Total	**1,557.2**	1,558.1	**0.33**	0.33	**–**	–	**–**	–	**–**	–	**–**	–	**0.008**	0.008
	Inferred	**485.9**	486.2	**0.30**	0.30	**–**	–	**–**	–	**–**	–	**–**	–	**0.007**	0.007
Aktogay oxide	Measured	**46.1**	73.0	**0.35**	0.37	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–
	Indicated	**0.3**	1.0	**0.33**	0.32	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–
	Total	**46.4**	74.0	**0.35**	0.37	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–
	Inferred	**0.5**	1.3	**0.19**	0.23	**–**	–	**–**	–	**–**	–	**–**	–	**–**	–
Total Aktogay[3, 4]	**Measured**	**818.5**	846.8	**0.33**	0.34	**–**	–	**–**	–	**–**	–	**–**	–	**0.008**	0.007
	Indicated	**785.1**	785.3	**0.32**	0.32	**–**	–	**–**	–	**–**	–	**–**	–	**0.008**	0.008
	Total	**1,603.6**	1,632.1	**0.33**	0.33	**–**	–	**–**	–	**–**	–	**–**	–	**0.008**	0.008
	Inferred	**486.4**	487.5	**0.30**	0.30	**–**	–	**–**	–	**–**	–	**–**	–	**0.007**	0.007
Bozshakol sulphide[4]	Measured	**449.2**	472.9	**0.36**	0.37	**0.15**	0.15	**1.1**	1.1	**–**	–	**–**	–	**0.008**	0.008
	Indicated	**429.8**	429.8	**0.35**	0.35	**0.13**	0.12	**1.1**	1.1	**–**	–	**–**	–	**0.009**	0.009
	Total	**879.0**	902.7	**0.36**	0.36	**0.14**	0.14	**1.1**	1.1	**–**	–	**–**	–	**0.008**	0.008
	Inferred	**261.3**	261.3	**0.34**	0.34	**0.14**	0.14	**1.2**	1.2	**–**	–	**–**	–	**0.008**	0.008
Bozshakol clay[4]	Measured	**111.8**	115.7	**0.43**	0.44	**0.19**	0.20	**1.2**	1.3	**–**	–	**–**	–	**0.006**	0.006
	Indicated	**1.1**	1.1	**0.48**	0.48	**0.27**	0.27	**1.7**	1.6	**–**	–	**–**	–	**0.004**	0.004
	Total	**112.9**	116.8	**0.43**	0.44	**0.19**	0.20	**1.3**	1.3	**–**	–	**–**	–	**0.006**	0.006
	Inferred	**0.1**	0.1	**0.36**	0.36	**0.40**	0.40	**1.7**	1.7	**–**	–	**–**	–	**0.003**	0.003
Total Bozshakol[4]	**Measured**	**561.0**	588.6	**0.37**	0.38	**0.16**	0.16	**1.1**	1.2	**–**	–	**–**	–	**0.007**	0.008
	Indicated	**430.9**	430.9	**0.35**	0.35	**0.13**	0.12	**1.1**	1.1	**–**	–	**–**	–	**0.009**	0.009
	Total	**991.9**	1,019.5	**0.36**	0.37	**0.15**	0.14	**1.1**	1.1	**–**	–	**–**	–	**0.008**	0.008
	Inferred	**261.4**	261.4	**0.34**	0.34	**0.14**	0.14	**1.2**	1.2	**–**	–	**–**	–	**0.008**	0.008
Koksay[5]	Measured	**246.5**	246.5	**0.41**	0.41	**–**	–	**–**	–	**–**	–	**–**	–	**0.004**	0.004
	Indicated	**340.8**	340.8	**0.45**	0.45	**–**	–	**–**	–	**–**	–	**–**	–	**0.003**	0.003
	Total	**587.3**	587.3	**0.43**	0.43	**–**	–	**–**	–	**–**	–	**–**	–	**0.003**	0.003
	Inferred	**148.7**	148.7	**0.37**	0.37	**–**	–	**–**	–	**–**	–	**–**	–	**0.002**	0.002
Peschanka[6] (Baimskaya)	Measured	**139.0**	–	**0.72**	–	**0.39**	–	**4.0**	–	**–**	–	**–**	–	**0.014**	–
	Indicated	**1,289.0**	–	**0.44**	–	**0.26**	–	**2.4**	–	**–**	–	**–**	–	**0.012**	–
	Total	**1,428.0**	–	**0.47**	–	**0.27**	–	**2.6**	–	**–**	–	**–**	–	**0.012**	–
	Inferred	**774.0**	–	**0.36**	–	**0.16**	–	**2.0**	–	**–**	–	**–**	–	**0.009**	–
Total KAZ Minerals	**Measured**	**1,789.2**	1,717.1	**0.40**	0.40	**0.09**	0.08	**1.3**	1.8	**0.04**	0.08	**0.01**	0.02	**0.007**	0.007
	Indicated	**2,869.8**	1,572.3	**0.41**	0.37	**0.14**	0.04	**1.7**	0.6	**0.03**	0.01	**0.01**	0.004	**0.009**	0.007
	Total	**4,659.0**	3,289.4	**0.41**	0.39	**0.12**	0.06	**1.6**	1.2	**0.03**	0.05	**0.01**	0.01	**0.009**	0.007
	Inferred	**1,670.5**	897.6	**0.34**	0.32	**0.10**	0.04	**1.1**	0.3	**–**	–	**–**	–	**0.008**	0.006

1 Resources include undiscounted Reserves. No ore loss or dilution has been included.

2 East Region zinc, lead, gold and silver grades shown in Measured Resources are estimated only to Indicated Resource confidence level.

3 Aktogay molybdenum grades shown in Measured Resources are estimated only to the Indicated Resource confidence level.

4 Measured Resources include stockpiled material.

5 Koksay gold mineralisation is concentrated within a portion of the deposit where the Measured and Indicated Resource containing gold is 249.5 Mt at a grade of 0.07 g/t.

6 The acquisition of the Baimskaya copper project was completed in January 2019. The Mineral Resource Estimate for the Peschanka deposit in the Baimskaya licence area was prepared by AMC Consultants Pty Ltd with an effective date of 30 June 2016 and based on copper equivalent cut-off grades of 0.2% for Measured and Indicated Resources and 0.3% for Inferred Resources.

Revision of Mineral Resources and Mineral Reserves statement to 31 December 2019

KAZ Minerals PLC has undertaken a review of the Company's Mineral Resource and Mineral Reserve estimates as the basis for the preparation of a Statement of Mineral Resources and Mineral Reserves for the Company as at 31 December 2019. The review has been conducted by a Company appointed Competent Person who is also an employee of KAZ Minerals.

KAZ Minerals is reporting its resources and reserves in accordance with the 2017 KAZRC and the 2012 edition of the JORC Code.

The KAZRC sets out minimum requirements for public reporting by Kazakhstan mining and exploration companies. It was developed by representatives of the mining industry in Kazakhstan in conjunction with CRIRSCO, and with support from The Committee of Geology and Subsoil Use of the Ministry for Investments and Development. Kazakhstan has now become a member of the CRIRSCO organisation and becomes aligned with international best practice for reporting within its mining industry.

The JORC Code is widely used internationally in jurisdictions where the national reporting standard is not consistent with the reporting requirements of stock markets such as the London Stock Exchange. The situation has changed now with the implementation of an internationally acceptable reporting code in Kazakhstan.

In most respects, the two codes are identical but there is a difference in terminology whereby KAZRC uses the term 'Mineral Reserve' (used in this report) where the JORC Code uses the term 'Ore Reserve'.

The full adoption of the KAZRC within Kazakhstan is currently in a transition period. New mining licences must comply with KAZRC requirements and existing licences, and sub-soil contracts, can continue reporting to the standards of GKZ, or use KAZRC. The interim period lasts until the end of 2023 when the KAZRC system will become compulsory.

The consideration of Mineral Resources is based on the KAZRC definition, which says that a Mineral Resource is "an occurrence of minerals in such form, quality and quantity that there are reasonable prospects for eventual economic extraction". In converting Mineral Resources to Mineral Reserves in accordance with the KAZRC, a number of Modifying Factors are considered. Consequently, the code defines a Mineral Reserve as "the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate, at the time of reporting, that extraction could reasonably be justified."

The term 'economically mineable' has no fixed definition in the KAZRC, and short-term fluctuations in factors such as metal prices or operating expenditure do not warrant the re-classification from Mineral Reserves to Mineral Resources. If, however, the changes are expected to be long-term or permanent in nature, then such re-classification is required.

For the sake of clarity in this report, references to the KAZRC categories 'Mineral Reserve' and 'Mineral Resource' are capitalised. The non-capitalised term 'reserve' refers to the historical Kazakhstan use of the word, which, depending on the context, can be broadly synonymous with both KAZRC terms 'Mineral Reserve' and 'Mineral Resource'.

The Competent Person is satisfied, from the audit undertaken, that the recently revised estimates of resources and reserves prepared by the Company for its operating mines in Kazakhstan and Kyrgyzstan are in accordance with the classification system required by law in Kazakhstan and that, correspondingly, the estimates have a consistent basis for expressing the degree of confidence for stating quantities of exploitable minerals at specific grades of metal content. On the basis of the estimates supplied by the Company, the Competent Person has applied the same technical criteria as used in previous audits, for preparation and restatement of Mineral Reserves and Mineral Resources as at 31 December 2019, in accordance with the KAZRC Code.

Competent Persons

Mineral Resource and Mineral Reserve estimates are based on information compiled by Competent Persons (as defined by the KAZRC and JORC Codes). Each of the Competent Persons has the appropriate professional membership and the relevant experience in relation to the Mineral Resources and/or Mineral Reserves being reported by them to qualify as a Competent Person as defined by the relevant code. Each has consented to the inclusion of their Mineral Resource and Mineral Reserve estimates in the form and context in which it appears in this report.

Operating mines

Simon Pepper – a Member of the Institute of Materials, Minerals and Mining, registered as a Chartered Engineer, a Fellow of the Public Association of Independent Experts of Subsoil of the Republic of Kazakhstan and a full-time employee of KAZ Minerals.

Koksay

Malcolm Titley – a Member and Registered Professional Geologist of The Australasian Institute of Geoscientists, employed by CSA Global Consultants Ltd and engaged as an external independent consultant by KAZ Minerals.

Peschanka

Tracie Burrows – a Member and Registered Professional Geologist of The Australasian Institute of Geoscientists, employed by AMC Consultants Pty Ltd and engaged as an external independent consultant by KAZ Minerals.

Annual General Meeting

The Annual General Meeting of the Company will be held at 12.15pm on Thursday 30 April 2020 at the offices of Linklaters LLP, One Silk Street, London EC2Y 8HQ, United Kingdom. The Notice of Annual General Meeting and Form of Proxy are enclosed with this Annual Report and Accounts. The Notice of Annual General Meeting can also be found in the Investors section on the KAZ Minerals website (www.kazminerals.com).

Electronic shareholder communications

KAZ Minerals uses its website (www.kazminerals.com) as its primary means of communication with its shareholders provided that the individual shareholder has agreed or is deemed to have agreed that communications may be sent or supplied in that manner. Electronic communications allow shareholders to access information instantly as well as helping KAZ Minerals reduce its costs and its impact on the environment. Shareholders can sign up for electronic communications via Computershare's Investor Centre website at www.investorcentre.co.uk. Shareholders that have consented or are deemed to have consented to electronic communications can revoke their consent at any time by contacting the Company's registrar. In addition to enabling shareholders to register to receive communications by email, Computershare's Investor Centre website provides a facility for shareholders to manage their shareholding online by allowing them to:

- view their share balance;
- change their address;
- view payment and tax information; and
- update payment instructions.

Computershare's Investor Centre website also offers a share dealing service for shareholders on the UK register. Please contact Computershare for further information.

Electronic voting

Shareholders can submit proxies for the 2020 Annual General Meeting electronically by logging on to www.investorcentre.co.uk/eproxy. Electronic proxy appointments must be received by the Company's registrar no later than 12.15pm on 28 April 2020 (or not less than 48 hours before the time fixed for any adjourned meeting).

Website

A wide range of information on KAZ Minerals is available at www.kazminerals.com, including:

- financial and operational information – annual and half-yearly reports as well as quarterly production reports;
- share price information – current trading details and historical charts;
- shareholder information – dividend information, Annual General Meeting results and details of the Company's registrar; and
- press releases – current and historical.

Shareholder interests at 31 December 2019

Number of shareholders: 1,343
Number of shares in issue: 480,723,977

By size of holding	No. of accounts	% of total accounts	% of ordinary share capital
1,000 and under	607	45.19%	0.04%
1,001 – 5,000	258	19.21%	0.14%
5,001 – 10,000	105	7.82%	0.16%
10,001 – 100,000	210	15.64%	1.67%
100,001 +	163	12.14%	97.99%
Totals	**1,343**	**100.00%**	**100.00%**

By category of shareholder	No. of accounts	% of total accounts	% of ordinary share capital
Private Shareholders	618	46.02%	0.38%
Banks/Nominees	689	51.31%	96.26%
Pension Funds	1	0.07%	0.00%
Investment/Unit Trusts	4	0.30%	0.00%
Corporate Holders	29	2.16%	1.63%
Share Plan Control Account	1	0.07%	0.01%
Treasury Account	1	0.07%	1.72%
Totals	**1,343**	**100.00%**	**100.00%**

Financial calendar

Ex-dividend date	23 April 2020
Record date	24 April 2020
Final dividend payable	22 May 2020

Events calendar

Q1 Production Report	30 April 2020
Annual General Meeting	30 April 2020
Q2 Production Report	30 July 2020
Half-yearly results announced	18 August 2020
Q3 Production Report	29 October 2020

Registrars

For information about proxy voting, dividends and to report changes in personal details, shareholders holding their shares on the UK register should contact:

Computershare Investor Services PLC

The Pavilions
Bridgwater Road
Bristol BS13 8AE
United Kingdom
Tel: +44 (0)370 707 1100
Fax: +44 (0)370 703 6101
Email: web.queries@computershare.co.uk

Shareholders holding their shares on the Kazakhstan Stock Exchange should contact:

Shareholder Enquiries

KAZ Minerals PLC
6th Floor, Cardinal Place
100 Victoria Street
London SW1E 5JL
United Kingdom
Tel: +44 (0)20 7901 7807
Email: shareholder@kazminerals.com

Unsolicited telephone calls and correspondence

Shareholders are advised to be wary of any unsolicited advice, offers to buy shares at a discount, or offers of free reports about the Company. These are typically from overseas based 'brokers' who target US or UK shareholders, offering to sell them what often turn out to be worthless or high risk shares. These operations are commonly known as 'boiler rooms' and the 'brokers' can be very persistent and extremely persuasive. If shareholders receive any unsolicited investment advice, they can check whether the person or organisation is properly authorised by the Financial Conduct Authority (FCA) at www.fca.org.uk/register and the matter may be reported to the FCA by using the share fraud reporting form at www.fca.org.uk/scams or by calling 0300 123 2040 (UK) or +44 300 123 2040 (international). Further information is available at www.fca.org.uk/scamsmart. Details of any share dealing facilities that the Company endorses will be included in Company mailings and on our website.

Dividends

The Board recommends the payment of a final dividend for the year ended 31 December 2019 of 8 US cents per ordinary share (2018: 6 US cents per share). If approved, the dividend will be paid on 22 May 2020 to shareholders on the UK register of members at the close of business in the UK on 24 April 2020.

Currency option and dividend mandate

The Company declares dividends in US dollars. For those shareholders who hold their shares on the UK register, the default currency for receipt of their dividends is US dollars, although they can elect to receive their dividends in UK pounds sterling. Those shareholders who wish to receive their dividend in UK pounds sterling, should contact the Company's registrar to request a currency election form.

Shareholders on the UK register can arrange for dividends to be paid directly into a UK bank or building society account. To take advantage of this facility, you should contact the Company's registrar to request a dividend mandate form or register online at www.investorcentre.co.uk. The arrangement is only available in respect of dividends paid in UK pounds sterling.

Company Secretary

Susanna Freeman
Tel: +44 (0)20 7901 7800
Email: susanna.freeman@kazminerals.com

Registered office

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6th Floor, Cardinal Place
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London SW1E 5JL
United Kingdom
Tel: +44 (0)20 7901 7800
Registered number: 05180783

Joint corporate brokers

Citigroup Global Markets Limited
33 Canada Square
Canary Wharf
London E14 5LB
United Kingdom

UBS Limited
5 Broadgate
London EC2M 2QS
United Kingdom

Auditors

KPMG LLP
15 Canada Square
Canary Wharf
London E14 5GL
United Kingdom

Aktogay II or Aktogay expansion
the expansion project at Aktogay to increase sulphide processing capacity at the site

APMs
Alternative Performance Measures being measures of financial performance, financial position or cash flows that are not defined or specified under IFRS but used by the Directors internally to assess the performance of the Group

Baimskaya or Baimskaya copper project
the mining licence covering the Peschanka copper deposit, located in the Chukotka region of Russia

Board or Board of Directors
the Board of Directors of the Company

Brexit
the UK's departure from the European Union

CAGR
compound annual growth rate

capital employed
the aggregate of equity attributable to owners of the Company, non-controlling interests and borrowings

cash operating costs
all costs included within profit before finance items and taxation, net of other operating income, excluding MET, royalties, depreciation, depletion, amortisation and special items

CDB or China Development Bank
China Development Bank Corporation

CIS
Commonwealth of Independent States, comprising former Soviet Republics

CIT
corporate income tax

CNY
Chinese yuan, basic unit of the renminbi

CO_2
carbon dioxide

Code or UK Corporate Governance Code
the UK Corporate Governance Code issued by the Financial Reporting Council in July 2018

Committee or Committees
any or all of the Audit; Health, Safety and Sustainability; Remuneration; Nomination; and Projects Assurance Committees depending on the context in which the reference is used

Company or KAZ Minerals
KAZ Minerals PLC

Competent Person
a minerals industry professional responsible for preparing and/or signing off reports on exploration results and mineral resources and reserves estimates and who is accountable for the prepared reports. A Competent Person has a minimum of five years' relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking

Copper Equivalent Production
copper equivalent production units, consisting of copper production plus gold production converted into copper units, assuming analyst consensus long-term average price forecasts of $6,700/t for copper and $1,300/oz for gold

CREST
an electronic means of settling share transactions and registering investors on a company's register of members

DBK
Development Bank of Kazakhstan

Deferred Cash Consideration
$225 million in cash payable to the Vendor at the Long Stop Date, in lieu (in whole or in part) of payment of Deferred Equity Consideration at Final Completion, if and to the extent that the Project Delivery Conditions are not satisfied at the date of Commercial Production

Deferred Consideration
any Deferred Equity Consideration payable at Final Completion and any Deferred Cash Consideration payable at the Long Stop Date, with a total value of $225 million

Deferred Equity Consideration
up to 21,009,973 KAZ Minerals shares to be issued to the Vendor or its nominee at Final Completion, if and to the extent that the Project Delivery Conditions are satisfied at the date of Commercial Production

Directors
the Directors of the Company

dollar or $ or US$
United States dollar, the currency of the United States of America

DTR
Disclosure Guidance and Transparency Rules of the UK Financial Conduct Authority

EBITDA
earnings before interest, taxation, depreciation, depletion, amortisation, MET and royalties and special items. A reconciliation to operating profit is in note 4(a)(i) of the consolidated financial statements

EPS
earnings per share

EPS based on Underlying Profit/(Loss)
profit/loss excluding special items and their resulting tax and non-controlling interest effects, divided by the weighted average number of ordinary shares in issue during the period (see note 14 of the consolidated financial statements)

EU
European Union

EUR
Euro, the currency of certain member states of the European Union

Final Completion
completion of the acquisition by KAZ Minerals of the remaining 25 per cent interest in the Baimskaya copper project, which will be at the earlier of (i) a date shortly after the date of Commercial Production and (ii) the Long Stop Date

Fluor
Fluor Corporation

Free Cash Flow
net cash flow from operating activities before capital expenditure and VAT associated with major growth projects less sustaining capital expenditure (see page 184 for a reconciliation to the closest IFRS based measure)

General Directors
the heads of the Group's operations at Bozshakol, Aktogay, the East Region and Bozymchak

GHG
greenhouse gas

g/t
grammes per metric tonne

GRI4
Global Reporting Initiative Sustainability Guidelines version 4

gross cash costs
cash operating costs, including pre-commercial production costs, excluding purchased cathode plus TC/RC on concentrate sales, divided by the volume of own copper sales

Gross EBITDA
earnings, including pre-commercial earnings, before interest, taxation, depreciation, depletion, amortisation, MET and royalties and special items

gross liquid funds
the aggregate amount of cash and cash equivalents and current investments less restricted cash

Gross Revenues
sales proceeds from all volumes sold, including pre-commercial production volumes

the Group
KAZ Minerals PLC and its subsidiary companies

HSS
Health, Safety and Sustainability

IAS
International Accounting Standard

IASB
International Accounting Standards Board

ICG
Industrial Construction Group LLC

ICMM
International Council on Mining and Metals

IFRIC
International Financial Reporting Interpretations Committee

IFRS
International Financial Reporting Standard

Initial Cash Consideration
$436 million in cash

Initial Completion
completion of the acquisition by KAZ Minerals of a 75 per cent interest in the Baimskaya copper project in the first half of 2019, after obtaining anti-monopoly and other regulatory approvals and satisfaction of certain other conditions

Initial Consideration
the Initial Cash Consideration and the Initial Equity Consideration payable at Initial Completion, with a total value of $675 million (at 31 July 2018)

Initial Equity Consideration
22,344,944 new KAZ Minerals shares valued at $239 million at 31 July 2018

IRR
internal rate of return

JORC
Joint Ore Reserves Committee

JORC Code
the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, a professional code of practice that sets minimum standards for Public Reporting of Minerals Exploration Results, Mineral Resources and Ore Reserves

Kazakhmys Holding Group
Kazakhmys Holding Group B.V., the entity to which the Disposal Assets were transferred (formerly Cuprum Netherlands Holding B.V.), a company owned by Vladimir Kim, a Director of the Company, and Eduard Ogay, a former Director of the Company

Kazakhstan
the Republic of Kazakhstan

KAZRC
The Kazakhstan Code for the public reporting of Exploration Results, Mineral Resources and Mineral Reserves, which sets out minimum requirements for public reporting by Kazakhstan mining and exploration companies

koz
thousand ounces

KPI
key performance indicator

kt
thousand metric tonnes

Kyrgyzstan
the Kyrgyz Republic

KZT or tenge
the official currency of the Republic of Kazakhstan

lb
pound, unit of weight

LBMA
London Bullion Market Association

LIBOR
London Interbank Offered Rate

Listing
the listing of the Company's ordinary shares on the London Stock Exchange on 12 October 2005

Listing Rules
the Listing Rules of the UK Listing Authority

LME
London Metal Exchange

Long Stop Date
31 March 2029

major growth projects
the initial construction of Aktogay, Bozshakol, the Aktogay expansion project and the Baimskaya copper project

megalitre
thousand cubic metres

MET
mineral extraction tax

Moz
million ounces

Mt
million metric tonnes

net cash costs
gross cash costs less by-product Gross revenues, divided by the volume of own copper sales

net debt
the excess of current and non-current borrowings over gross liquid funds. A reconciliation of net debt is in note 32 of the consolidated financial statements

NFC
China Non Ferrous Metal Industry's Foreign Engineering and Construction Co., Ltd

NPV
net present value

ounce or oz
a troy ounce, which equates to 31.1035 grammes

PBoC
People's Bank of China

PJ
a standard unit of energy, work and heat equal to 1,015 joules

ppm
parts per million

Project Delivery Conditions
conditions to the payment of Deferred Equity Consideration at Final Completion in lieu of payment of Deferred Cash Consideration at the Long Stop Date, which relate to state construction of transport and power infrastructure, confirmation of federal tax incentives and demonstration of year-round concentrate shipment from the port of Pevek on agreed terms

PXF
pre-export finance debt facility

Recordable Case
a Recordable Injury case or a Recordable Disease case

Recordable Disease
a new disease in the categories of occupational respiratory disorders, occupational hearing loss, musculoskeletal disorders, occupational cancers and other occupational medical disorders

Recordable Injury
a new occupational injury of sufficient severity that it requires medical treatment beyond first aid or results in the worker's inability to perform his or her routine function on the next calendar day

Restructuring
the transfer, subject to certain consents and approvals, of the mining, processing, auxiliary, transportation and heat and power assets of the Group in the Zhezkazgan and Central Regions of Kazakhstan to Kazakhmys Holding Group, which was approved by shareholders at the General Meeting on 15 August 2014 and completed on 31 October 2014. The assets transferred included 12 copper mines, mine development opportunities, four concentrators, two smelters, two coal mines and three captive heat and power stations.

RMB
renminbi, the official currency of the People's Republic of China

$/t or $/tonne
US dollars per metric tonne

Scope 1 emissions
direct greenhouse gas emissions from sources that are owned by the Group

Scope 2 emissions
indirect greenhouse gas emissions from consumption of purchased electricity, heat or steam

som
the official currency of Kyrgyzstan

Speak Up
the Group's confidential whistleblowing arrangements

special items
those items which are non-recurring or variable in nature and which do not impact the underlying trading performance of the Group. Special items are set out in note 8 to the consolidated financial statements

SX/EW
solvent extraction and electrowinning, a two-stage metallurgy process used for the extraction of copper

t
metric tonnes

TASED
a territory of accelerated social and economic development

TC/FD
The Task Force on Climate-related Financial Disclosures

TC/RCs
treatment charges and refining charges for smelting and refining services

TJ
a standard unit of energy, work and heat equal to 1012 joules

Total Recordable Case Frequency Rate
the number of Recordable Cases occurring per million hours worked

TRI
Total Recordable Injuries

Total Recordable Injury Frequency Rate or TRIFR
the number of Recordable Injuries occurring per million hours worked

UK
United Kingdom

Underlying Profit/(Loss)
profit/loss excluding special items and their resulting tax and non-controlling interest effects. Underlying Profit is set out in note 14 to the consolidated financial statements

US
United States of America

USc/lb
US cents per pound

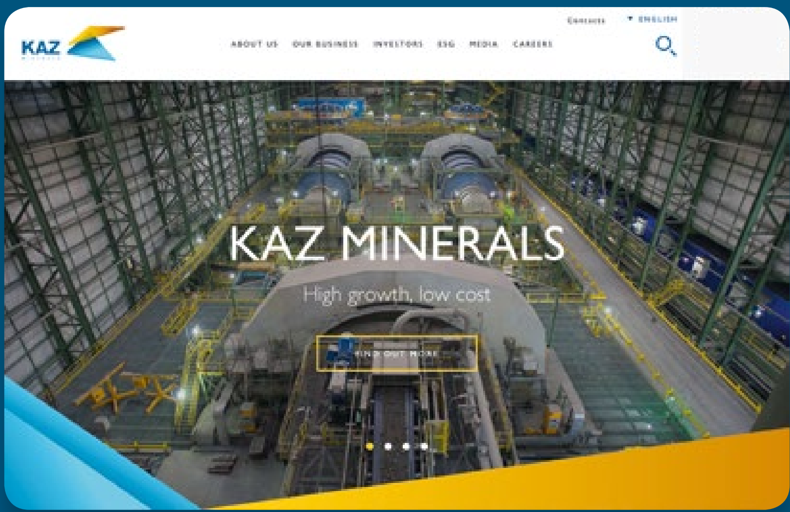
Vendor
Aristus Holdings Limited, a company owned and controlled by a consortium of individual investors including Roman Abramovich and Alexander Abramov

CAUTIONARY NOTICE CONCERNING FORWARD-LOOKING STATEMENTS

This Annual Report and Accounts includes certain forward-looking statements. All statements other than historical facts are forward-looking statements. Examples of forward-looking statements include those regarding the business, strategy and plans of KAZ Minerals and its current goals, assumptions and expectations relating to its future financial condition, performance and results, commodity demand and trends in commodity prices, growth opportunities and any assumptions underlying or relating to any of the foregoing. Forward-looking statements are sometimes but not always identified by words such as 'aim', 'intend', 'anticipate', 'estimate', 'plan', 'believe', 'expect', 'may', 'should' or in each case their negative and similar expressions. By their nature, forward-looking statements involve known and unknown risks, assumptions and uncertainties and other factors which are unpredictable as they relate to events and depend on circumstances, that will occur in the future, which may cause actual results, performance or achievements of KAZ Minerals to be materially different from those expressed or implied in these forward-looking statements. Principal risk factors that could cause KAZ Minerals' actual results, performance or achievements to differ materially from those in the forward-looking statements include (without limitation) health and safety, community and labour relations, employees, environmental, business interruption, new projects and commissioning, reserves and resources, political, legal and regulatory compliance, commodity price, foreign exchange and inflation, exposure to China, acquisitions and divestments, liquidity, and such other risk factors disclosed in this Annual Report and Accounts. Forward-looking statements should therefore be construed in light of such risk factors. These forward-looking statements should not be construed as a profit forecast.

No part of this Annual Report and Accounts constitutes, or shall be taken to constitute, an invitation or inducement to invest in KAZ Minerals PLC, or any other entity, and shareholders are cautioned not to place undue reliance on the forward-looking statements. Except as required by the Listing Rules and applicable law, rule or regulation, KAZ Minerals does not undertake any obligation to publicly update or change any forward-looking statements, to reflect events or new information occurring after the date of this Annual Report and Accounts.

For all the latest information
and to find out more
about the Company,
please visit our website
www.kazminerals.com



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