KAZ MINERALS PLC
6TH FLOOR
CARDINAL PLACE
100 VICTORIA STREET
LONDON SW1E 5JL
Tel: +44 (0) 20 7901 7800

21 February 2019

KAZ MINERALS PLC AUDITED RESULTS FOR THE YEAR ENDED 31 DECEMBER 2018

FINANCIAL HIGHLIGHTS

- **Revenues increase by 12% to $2,162 million compared to Gross Revenues of $1,938 million in 2017, supported by increased copper production[1] and improved copper prices**
  - 2018 full year copper sales volumes of 296 kt (2017: 256 kt)
- **EBITDA of $1,310 million at a margin of 61% (2017 Gross EBITDA: $1,235 million)**
  - Operating profit increased by 19% to $851 million (2017: $715 million)
- **First quartile net cash cost of 85 USc/lb (2017: 66 USc/lb), amongst the lowest of any pure-play copper miner**
  - Gross cash costs of 144 USc/lb, 4% higher than 2017 (138 USc/lb)
  - Structural factors continue to support cost position, including low strip ratios, energy efficiency, favourable water and transport costs, automation and the use of modern, large scale equipment
  - Increase in net cash cost position compared to 2017 mainly due to higher volumes from Aktogay, where by-product output is minimal
- **Free Cash Flow of $585 million (2017: $452 million)**
  - Cash flow from operations of $673 million, lower than $752 million in 2017 due to receipt of $232 million of non-current VAT refunds in the prior year
- **Net debt $1,986 million (2017: $2,056 million)**
  - Gross borrowings of $3,453 million (2017: $3,877 million) and Gross Liquid Funds[3] of $1,467 million (2017: $1,821 million)
  - Reduction in net debt driven by higher free cash flow despite expansionary capital expenditure of $530 million during the year
  - Approximately $130 million of sustaining and expansionary capital expenditure guided for 2018 carried over into 2019
  - $386 million of initial $436 million cash consideration for Baimskaya acquisition paid in January 2019
- **Final dividend of 6.0 US cents per ordinary share recommended, which together with the interim dividend of 6.0 US cents per ordinary share paid on 3 October 2018, brings the total dividend for 2018 to 12.0 US cents per ordinary share**

OPERATIONAL HIGHLIGHTS

- **Copper production[1] increased by 14% and gold production[2] by 3% compared to 2017**
  - Copper production[1] of 295 kt at upper end of guidance range of 270-300 kt, gold[2] and silver[2] above guidance
  - 2019 copper production[1] expected to be in the region of 300 kt, as continued growth at Bozshakol and Aktogay offsets lower forecast output from East Region

NEAR AND LONG TERM GROWTH IN COPPER

- **The Group has established a pipeline of value-accretive growth projects**
  - Aktogay expansion project underway to deliver low risk brownfield growth with first production from 2021
  - Completed acquisition of the Baimskaya licence area in January 2019, one of the top ten largest undeveloped copper resources in the world, for $900 million in cash and shares

$ million (unless otherwise stated)	**2018**	2017
Revenues	**2,162**	1,663
EBITDA[3]	**1,310**	1,038
Operating profit	**851**	715
Profit before taxation	**642**	580

Underlying Profit[3]	**530**	476
EPS – basic and diluted ($)	**1.14**	1.00
EPS – based on Underlying Profit ($)[3]	**1.18**	1.07
Cash flow from operations	**673**	752
Free Cash Flow[3]	**585**	452
Gross cash cost (USc/lb)[3]	**144**	138
Bozshakol	**129**	121
Aktogay	**106**	100
East Region & Bozymchak	**244**	208
Net cash cost (USc/lb)[3]	**85**	66
Bozshakol	**58**	54
Aktogay	**103**	98
East Region & Bozymchak	**94**	42
Net debt[3]	**1,986**	2,056
Gross borrowings	**3,453**	3,877
Gross liquid funds[3]	**1,467**	1,821

1 Payable metal in concentrate and copper cathode from Aktogay oxide ore.
2 Payable metal in concentrate.
3 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 54.

Andrew Southam, Chief Executive Officer, said: "KAZ Minerals increased copper production by 14% and delivered a net cash cost of just 85 USc/lb in 2018, maintaining the Group's position in the first quartile of the industry cash cost curve. We also progressed our high growth strategy, commencing work on the expansion of Aktogay and securing a new world class project through the acquisition of Baimskaya in Russia. Our proven asset base is generating strong cash flows, enabling the Group to invest in significant growth in copper production in both the near and long term, through value-accretive greenfield and brownfield projects. Over this period, the outlook for the copper price remains positive as supply from existing mines is set to decline, whilst demand from both traditional and new markets is forecast to continue to grow."

For further information please contact:

KAZ Minerals PLC

Chris Bucknall	Investor Relations, London	**Tel: +44 20 7901 7882**
Anna Mallere	Investor Relations, London	**Tel: +44 20 7901 7814**
Maksut Zhapabayev	Corporate Communications, Almaty	**Tel: +7 727 244 03 53**

Brunswick Group

Carole Cable, Charlie Pretzlik	**Tel: +44 20 7404 5959**

REGISTERED OFFICE
6th Floor, Cardinal Place, 100 Victoria Street, London SW1E 5JL, United Kingdom.

NOTES TO EDITORS

KAZ Minerals PLC ('KAZ Minerals' or 'the Group') is a high growth copper company focused on large scale, low cost, open pit mining in Kazakhstan, Kyrgyzstan and Russia. It operates the Bozshakol and Aktogay open pit copper mines in the Pavlodar and East Region of Kazakhstan, three underground mines and associated concentrators in the East Region of Kazakhstan and the Bozymchak copper-gold mine in Kyrgyzstan. In 2018, total copper production was 295 kt with by-products of 50 kt of zinc in concentrate, 183 koz of gold and 3,511 koz of silver.

The Group's new operations at Bozshakol and Aktogay have delivered one of the highest growth rates in the industry and transformed KAZ Minerals into a company dominated by world class, open pit copper mines.

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 38 years at an average copper grade of 0.37%. 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.

Aktogay is a large scale, open pit mine similar to Bozshakol, with a remaining mine life of 27 years (including the expansion project) at an average copper grade of 0.37% (oxide) and 0.33% (sulphide). Aktogay commenced production of copper cathode from oxide ore in December 2015 and copper in concentrate from sulphide ore in February 2017. The operating sulphide concentrator has an annual ore processing capacity of 25 million tonnes and the sulphide processing capacity will be doubled to 50 million tonnes with the addition of a second concentrator by the end of 2021. Aktogay is competitively positioned on the global cost curve and will produce an average of 90 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. Copper production from oxide ore will be in the region of 20 kt per annum until 2025.

In January 2019, the Group acquired the Baimskaya licence area in the Chukotka region of Russia, one of the world's most significant undeveloped copper assets. The Peschanka deposit within the Baimskaya licence area has the potential to become a large scale, low cost, open pit copper mine, 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. Average annual production over the first ten years of operations is expected to be 250 kt copper and 400 koz gold, or 330 kt Copper Equivalent Production, with a mine life of approximately 25 years and first quartile operating costs. The project is located in a region identified by the Russian Government as strategically important for economic development and will benefit from the construction of state-funded power and transport infrastructure and the provision of tax incentives. The estimated capital budget for the construction of the project is $5.5 billion. The Group expects the project to generate a significant NPV uplift and an attractive IRR at analyst consensus copper prices. The development of the Peschanka deposit at Baimskaya will enable the Group to continue its high growth trajectory, adding a large-scale, long-life asset to the Group's portfolio.

KAZ Minerals is listed on the London Stock Exchange and the Kazakhstan Stock Exchange and employs around 14,000 people, principally in Kazakhstan.

FORWARD-LOOKING STATEMENTS

These results include forward-looking statements with respect to the business, strategy and plans of KAZ Minerals and its current goals, assumptions and expectations relating to its future financial condition, performance and results. Although KAZ Minerals believes that the expectations reflected in such forward-looking statements are reasonable and are made by the Directors in good faith, based on current plans, estimates and projections, no assurance can be given that such expectations will prove to be correct. 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) occupational health and safety, commodity prices, foreign exchange and inflation, mergers, acquisitions and divestments, major projects ramp up, business interruption, new projects, external suppliers and contractors, community and labour relations, exposure to China, staff skills, recruitment and retention, political risk, liquidity management, tax regime and legislation compliance, environmental management, reserves and resources and such other risk factors disclosed in KAZ Minerals' most recent 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 these results 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, KAZ Minerals does not undertake any obligation to update or change any forward-looking statements to reflect events occurring after the date of these results.

SHAREHOLDER INFORMATION

The Company declares dividends in US dollars. The default currency for payment of dividends is US dollars, although shareholders 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.

For those shareholders who have elected to receive their dividends in UK pounds sterling, the currency conversion rate to convert the dividend into UK pounds sterling will be £0.7770 to the US dollar. The conversion rate is based on the average exchange rate for the five business days ending two days before the date of the annual results announcement.

Subject to the approval of shareholders at the Annual General Meeting on 2 May 2019, the final dividend in US dollars and UK pounds sterling will be paid on Friday 17 May 2019 to shareholders on the register at the close of business in the UK on the record date, 23 April 2019. The ex-dividend date is Thursday 18 April 2019.

ANNUAL GENERAL MEETING

The 2019 Annual General Meeting will be held at 12.15pm on Thursday 2 May 2019 at Linklaters LLP, One Silk Street, London EC2Y 8HQ, United Kingdom.

The 2018 Annual Report and Accounts and details of the business to be conducted at the Annual General Meeting will be mailed to shareholders and posted on the Company's website (www.kazminerals.com) in late March 2019.

CHAIR'S STATEMENT

In 2018, KAZ Minerals has delivered a strong operational performance and progressed its high growth strategy, securing a new world class copper project through the acquisition of the Baimskaya licence area in Russia. In the near term we are focused on the expansion of Aktogay, where work has commenced on a $1.2 billion project to double processing capacity, adding 80 ktpa of additional copper production from 2022.

Health and safety

Providing our employees and contractors with a safe working environment is the Group's highest priority. While fatalities are on a long term downward trend, I am disappointed to report that there were four fatalities at our underground mining operations during 2018. The Board HSE Committee visited the Group's operations twice during the year to monitor progress on the initiatives we are implementing to improve safety culture and performance, in particular at our underground mines in the East Region.

The Group's open pit mines of Bozshakol, Aktogay and Bozymchak have operated without any fatal incidents for a total of 38 million man hours, reflecting the strong safety culture that we have established at these operations. The Group is committed to its goal of zero fatalities across all assets and we will continue to devote the necessary resources to achieve this.

Near and long term growth in copper

The Group has built a track record of delivering large scale, open pit copper projects in the CIS region through the successful execution of the Bozshakol and Aktogay projects. Copper production from these mines has ramped up to achieve an industry leading annual growth rate of over 50% from 2015 to 2018. 79% of our 295 kt copper production in 2018 was from our recently commissioned mines.

Looking forward, we believe the medium-term demand outlook for copper is robust. There is a global trend towards investment in highly copper intensive renewable energy generation, supported by new sources of demand such as the growing use of electric vehicles. Copper supply will be challenged as head grades at operating mines across the world are declining and resources depleting. We have reviewed a large number of potential copper projects and the results of this exercise reinforced our view of a growing copper supply deficit over the next decade. Large scale copper projects with attractive operating costs are scarce and many face significant execution challenges.

Through our commitment to the Aktogay expansion project and the acquisition of Baimskaya we have now established a pipeline of value-accretive projects which will enable the Group to continue to deliver transformational growth in copper into a strengthening market, whilst maintaining our position as a first quartile producer on the cost curve.

Aktogay expansion project

The Aktogay expansion was approved by the Board in December 2017 and is expected to double Aktogay's sulphide ore processing capacity by the end of 2021 through the construction of an additional concentrator and crusher. This is a relatively low risk brownfield project which will deliver near term material copper production growth, with first output from the new plant expected in 2021, contributing 80 ktpa from 2022-27, and 60 ktpa thereafter. The design of the new processing facility is identical to the original Bozshakol and Aktogay sulphide concentrators and this will be the third such plant constructed by the Group.

In 2018, the Group locked-in pricing on certain key long lead items from equipment suppliers and commenced preparatory earthworks ahead of the main structural construction phase beginning in 2019. Our recent experience in building facilities of this type will enable us to execute a greater proportion of the project using the Group's in-house management capabilities than we did with Bozshakol or Aktogay, working closely with proven local and international contractors and suppliers.

Baimskaya

Our review of potential growth projects identified the Peschanka deposit in the Baimskaya licence area as a rare opportunity to acquire a globally significant greenfield copper resource, which is located in a similar geographic region to our existing operations. Peschanka is a large scale, copper porphyry deposit with a low strip ratio and the project has certain construction and operating challenges in common with our recently commissioned open pit mines in Kazakhstan. The average copper and gold grades at Peschanka are higher, whilst capital intensity is lower than both Bozshakol and Aktogay, based on our expectation of copper equivalent output of 330 kt over the first 10 years.

After a due diligence process led by our experienced projects team with support from external consultants, the Board approved the acquisition of the Baimskaya licence area in August 2018 for a total consideration of $900 million, comprising an initial cash payment of $436 million and 22.3 million shares with the remaining consideration expected to be payable in KAZ Minerals shares. A share lock-up period and the deferred consideration structure aligns the interests of the Vendor with KAZ Minerals in commencing copper production from the asset as early as possible and allows the Vendor to participate in the upside from the successful delivery of the project, as shareholders of the Group. Initial Completion took place on 22 January 2019, following receipt of the required government approvals and the satisfaction of other conditions precedent.

We have appointed Fluor to conduct a bankable feasibility study of the Peschanka deposit and work on this is underway, with the results expected to be announced to the market in the first half of 2020. This will include guidance on the timing of capital expenditure, expected production volumes, operating costs and sustaining capital expenditure. In parallel with the feasibility study, the Group will have discussions with banks on financing the construction phase and evaluate the potential for partnering.

Delivering for all stakeholders

KAZ Minerals is a responsible developer and operator of copper mines and we seek to balance the interests of all stakeholders in our business.

As a major investor in Kazakhstan, the Group has generated growth in industrial output, export earnings, GDP and employment through the delivery of the Bozshakol and Aktogay projects. The Group paid taxes of $368 million in 2018 in Kazakhstan and our total economic value distributed was over $1.4 billion.

KAZ Minerals supports a social investment programme focused on healthcare, education, infrastructure, culture and sport to help build on the strong relationships that exist with the communities in the regions of our operations and to support the development of Kazakhstan at a national level.

As we have increased output from our recently launched open pit mines, the energy and CO_2 intensity of our operations has reduced significantly. Energy intensity measured as TJ / kt of ore processed has reduced every year from 2015 to 2018, falling from 0.86 TJ to 0.22 TJ. In the future, the CO_2 intensity of our operations is expected to improve further, as we benefit from economies of scale at the expanded Aktogay facilities. Future production from Baimskaya will primarily be powered by energy from carbon-free sources.

KAZ Minerals continues to be a sector leader in gender equality, with a rate of female participation in the workforce of 23%, amongst the highest in the industry. The proportion of women employed is also reflected at senior management level and I am pleased to report that two of the Group's senior female professionals were recognised in this year's '100 Global Inspirational Women in Mining 2018' awards.

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.

In Bozshakol and Aktogay, the Group has a portfolio of large scale, low cost operations which are highly cash generative and have performed strongly in the year. This has enabled the rapid de-gearing of the balance sheet, with the Group's net debt to EBITDA ratio at 1.5x at 31 December 2018. Accordingly, the Board has recommended a final dividend of 6.0 US cents per share. Combined with the interim dividend of 6.0 US cents per share, the dividend in respect of the 2018 financial year is 12.0 US cents per share.

An initial cash payment of $386 million for the Baimskaya acquisition has been paid from existing liquidity, with a further $50 million cash payment expected to be settled in 2019. The financing requirements of the Baimskaya project construction including the capital budget, phasing, sources of funding and partnering options will be assessed during the feasibility study, following which the Board will further review the Group's allocation of capital.

Outlook

In the second half of 2018, short term macroeconomic concerns and a lower than average level of supply disruption weighed on the copper price. However, the medium term fundamentals for the copper market remain strong and support the Group's strategy of investing in large scale copper projects that will deliver value-accretive growth. Together, the Aktogay expansion and Baimskaya projects offer an industry leading pipeline of near and long term growth, which will enable the Group to double copper production while maintaining its position in the first quartile of the global cost curve.

CHIEF EXECUTIVE OFFICER'S REVIEW

KAZ Minerals achieved high growth in production, earnings and free cash flow from its portfolio of low cost copper mines in 2018. Copper production increased by 14% to 295 kt (2017: 259 kt) and the Group maintained its position in the first quartile of the cost curve with a net cash cost of 85 USc/lb, amongst the lowest of any pure play copper producer globally. With the new Bozshakol and Aktogay mines fully ramped up, the Group is now focused on operating consistently at design capacity and identifying opportunities to improve efficiency and reduce costs in existing operations, while planning ahead for the future growth to be delivered from the Aktogay expansion and Baimskaya copper project in Russia.

Health and safety

The Group prioritises its health and safety performance and I am disappointed to report that four fatalities occurred as a result of three incidents in our underground mining operations in the East Region during 2018. No fatality is ever acceptable and we are focused on our goal of operating with zero fatalities.

The number of fatalities continues to be on a long term downward trend. Our open pit mines at Bozymchak, Bozshakol and Aktogay have all operated with zero fatalities since the commencement of mining operations. A strong safety culture and a high degree of compliance with safety procedures has been established and maintained at these mines and we strive to raise standards at our underground mines to the same level. In 2018, we conducted detailed health and safety audits at all our mines and held Group wide workshops, bringing together managers from different operations to share best practice. We have also invested in improving our emergency response and medical support capabilities. To address longer term occupational health issues, we have established new industrial hygiene guidance, medical support standards and rehabilitation and return to work procedures.

Our employees

The Group employs approximately 14,000 staff and 8,000 contractors. We are committed to providing fair remuneration, a safe working environment and ongoing professional development for all our people, as set out in our Corporate Values. We recognise the crucial role of our employees in delivering the Group’s success and I would like to thank our staff, whose contribution has enabled the Group to perform well in 2018.

Review of operations

Copper production in 2018 was 295 kt, compared with guidance of 270-300 kt (2017: 259 kt). Achieving the upper end of the copper production range was largely due to output from Aktogay where a well-executed ramp up, consistent periods of operation at design capacity in both the sulphide and oxide plants and a strong copper grade delivered output of 131 kt (2017: 90 kt), which was above the top of the guided range of 110-130 kt. Bozshakol increased its ore processed to 28.5 Mt in 2018, including over 15 Mt processed in the second half of the year, approaching its design capacity of 30.0 Mtpa. Bozshakol achieved the upper half of the guided range for copper production of 95-105 kt, with full year output of 102 kt (2017: 101 kt). The East Region and Bozymchak produced 62 kt of copper (2017: 67 kt), slightly below guidance of c.65 kt.

Group gold production of 183 koz was 3% higher than 2017 as increased processing volumes at Bozshakol more than offset the decline in average gold grades across the Group to 0.31 g/t (2017: 0.33 g/t). Silver output of 3,511 koz was in line with the prior year (2017: 3,506 koz) as lower output from the East Region and Bozymchak mines was replaced by increased silver production from the ramp up of Aktogay. Zinc in concentrate production declined by 14% to 50 kt (2017: 58 kt), as mining moved through transitional areas at Artemyevsky with lower than anticipated zinc grades.

Production outlook

Ore processing volumes at Bozshakol and Aktogay are expected to be higher in 2019 compared with 2018 as both facilities operate at or close to design capacity for the full year, though at Aktogay this will be partially offset by a reduction in the average copper grade processed. Copper production guidance for Bozshakol is set at 105-115 kt for 2019 and 130-140 kt for Aktogay, including c.25 kt of oxide copper production. Combined with East Region and Bozymchak output of around 55 kt, Group copper production guidance for 2019 is for production in the region of 300 kt. Gold production is expected to be 170-185 koz in 2019, as lower gold grades are offset by higher ore throughput at Bozshakol. Group silver output in 2019 is guided to be approximately 3,000 koz.

Financial performance

The Group generated $2,162 million of revenues in 2018, an increase of 12% compared with $1,938 million in the prior year due to increased production volumes and higher copper prices. The average LME copper price in 2018 of $6,526/t was 6% higher than 2017, although prices were volatile, reaching a four year high of $7,263/t in June before declining to a low of $5,823/t in September.

The Group recorded EBITDA of $1,310 million, representing an increase of 6% compared with Gross EBITDA of $1,235 million in 2017, as higher production volumes and copper prices were offset by the increase in unit costs, mainly due to the ramp up of Aktogay. Operating profit increased by 19% to $851 million (2017: $715 million). Free Cash Flow increased by 29% to $585 million (2017: $452 million) and cash flow from operations reduced to $673 million (2017: $752 million), due to the receipt of $232 million of net non-current VAT refunds in 2017.

Unit costs

Supported by increased production volumes and a weaker tenge in the second half of the year, the Group continued to operate with one of the lowest net cash costs of any pure play copper producer globally, with all divisions in the first quartile of the industry cost curve in 2018. Group gross cash costs were 4% higher in 2018 at 144 USc/lb (2017: 138 USc/lb), mainly due to higher unit costs in the East Region. The Group's net cash cost position increased to 85 USc/lb from 66 USc/lb in 2017 as expected, due to the greater share of production from the Aktogay mine, where by-product output is minimal. Aktogay ramped up sulphide ore processing volumes to 20.8 Mt from 12.9 Mt in 2017 and produced 45% of the Group's copper output in 2018, at a gross cash cost of 106 USc/lb and a net cash cost of 103 USc/lb, compared with 2018 gross cash cost guidance of 110-130 USc/lb. Bozshakol delivered a gross cash cost of 129 USc/lb against 2018 guidance of 130-150 USc/lb and a full year net cash cost of 58 USc/lb (2017: 54 USc/lb), supported by strong gold output of 128 koz (2017: 119 koz). At 58 USc/lb in 2018, Bozshakol continues to operate below the ten year net cash cost guidance set in 2016 US dollar terms of 70-90 USc/lb over the first ten years of the life of the mine.

In the East Region and Bozymchak, gross cash costs increased by 17% to 244 USc/lb (2017: 208 USc/lb), compared with guidance of 230-250 USc/lb, as cost and wage inflation combined with a reduced copper output resulted in higher unit costs. The East Region and Bozymchak continued to operate within the first quartile of the cost curve with a net cash cost of 94 USc/lb (2017: 42 USc/lb), as by-product credits of 150 USc/lb were generated (2017: 166 USc/lb) from slightly lower gold, silver and zinc volumes compared with the prior year.

Balance sheet

Net debt reduced from $2,056 million at the 2017 year end to $1,986 million at 31 December 2018, as increased cash flow from operations was offset by the settlement of $281 million of deferred capital expenditure relating to the original Aktogay project and investment in the Aktogay expansion project amounting to $204 million in 2018. Gross borrowings reduced to $3,453 million at the year end (2017: $3,877 million) as the Group continued to pay down its debt facilities according to agreed schedules. Gearing, measured as a multiple of net debt to EBITDA, reduced to 1.5x from 1.7x at the end of 2017. Additional financing is required for the Aktogay expansion project, which the Board expects to obtain in the first half of 2019.

Financial guidance

Gross cash costs at Bozshakol are expected to benefit from improved throughput and stable copper grades in 2019 compared with 2018, with some upwards pressure from general mining cost inflation and increased maintenance costs. Gross cash cost guidance for Bozshakol is therefore held at the same level as guided in 2018, at 130-150 USc/lb.

The Aktogay sulphide concentrator operated at an average of 83% of design ore throughput capacity as it ramped up across 2018 and unit costs are expected to benefit from higher throughput in 2019, as the plant operates at or close to design capacity. This cost benefit will be offset by an expected reduction in the average copper grade processed from the elevated levels in 2018 and general mining inflation. Gross cash cost guidance for Aktogay is set at 105-125 USc/lb (in line with the 10 year guidance range of 100-120 USc/lb for the project over its first ten years of operation, in 2016 US dollar terms).

Gross cash costs in the East Region and Bozymchak are expected to be impacted by lower copper output, wage inflation and higher raw materials prices and 2019 guidance is set at 260-280 USc/lb, but will still benefit from significant by-product credits.

Sustaining capital expenditure in 2019 is expected to be in the region of $50 million in the East Region and Bozymchak. At Bozshakol and Aktogay, total sustaining capital expenditure in 2018 was $44 million compared with guidance of $65 million and approximately $20 million of spending has been carried forward into 2019. Sustaining capital expenditure guidance is therefore expected to be $50 million at Bozshakol and $50 million at Aktogay in 2019.

Excluding the Baimskaya copper project, expansionary capital expenditure in 2019 will comprise $400 million on the Aktogay expansion project, $70 million on the Artemyevsky II mine extension and approximately $20 million on continued technical studies at Koksay, funded by the $70 million investment into the Koksay entity by NFC which is expected to be completed in the first half of 2019. Final contractor retention payments of approximately $40 million at Bozshakol will be settled in early 2019 and approximately $70 million of expansionary capital expenditure will be incurred at Aktogay in 2019, largely to complete the second stage of heap leach cells.

In January 2019, the Group paid $386 million of cash consideration in respect of the acquisition of the Baimskaya licence area with a further $50 million payment expected to be made during 2019 following the release of a guarantee made by the acquired entity which is the legal owner of the Baimskaya licence. Expansionary capital expenditure on this project will mostly relate to the completion of a bankable feasibility study, with an estimated total spend of $70 million in 2019. Initial spend on site infrastructure may be considered later in the year. A capital expenditure profile for Baimskaya will be provided together with other project metrics following completion of the bankable feasibility study in the first half of 2020.

Outlook

With all of the Group's current mining operations now fully ramped up, we are focused on consistently running our processing plants at their design capacity. The Group is firmly established as a first quartile producer on the copper cash cost curve and we expect to continue to benefit from the structural factors which underpin this, including low strip ratios, energy efficiency, favourable water and transport costs, automation and the use of modern, large scale mining and processing equipment.

The Group is entering an important phase in the construction of the Aktogay expansion project with the main structural works set to commence in 2019. This project will add 80 ktpa of copper production over the period 2022-27, at a low capital intensity of $15,000 per tonne of annual copper production. The additional cash flow generation from this low risk brownfield project will help to support our investment in the Peschanka deposit at Baimskaya, our longer term growth project, which is expected to start production in 2026.

OPERATING REVIEW

The Group's operations in 2018 comprised the Bozshakol and Aktogay open pit copper mines in the Pavlodar and East regions of Kazakhstan, three underground mines in the East Region of Kazakhstan, the Bozymchak copper-gold mine in Kyrgyzstan and their associated concentrators.

Group production summary

kt (unless otherwise stated)	**2018**	2017
Copper production	**294.7**	258.5
Bozshakol	**101.6**	101.3
Aktogay	**131.4**	90.2
East Region and Bozymchak	**61.7**	67.0
Zinc in concentrate	**49.7**	57.6
Gold production (koz)	**183.4**	178.7
Silver production (koz)	**3,511**	3,506

BOZSHAKOL

The Bozshakol open pit mine is a first quartile asset on the global cost curve with a remaining mine life of 38 years at an average copper grade of 0.37%. The main sulphide concentrator, with a processing capacity of 25 million tonnes, commenced production in the first quarter of 2016 and was declared commercial in October 2016. The separate clay plant, which can process a further 5 million tonnes per annum, began commissioning in the fourth quarter of 2016 and achieved commercial production on 1 July 2017.

Production summary

kt (unless otherwise stated)	**2018**	2017
Ore extraction	**30,722**	34,612
Ore processed	**28,454**	24,558
Average copper grade processed (%)	**0.48**	0.53
Copper recovery rate (%)	**79**	81
Copper in concentrate	**106.4**	106.0
Copper production	**101.6**	101.3
Average gold grade processed (g/t)	**0.26**	0.28

Gold recovery rate (%)	**59**	58
Gold in concentrate (koz)	**136.7**	127.2
Gold production (koz)	**127.8**	119.0
Silver production (koz)	**666**	687

Processing volumes of 28,454 kt were 16% higher than the prior year (2017: 24,558 kt) reflecting the ramp up of both the sulphide and clay concentrators. In the second half of the year ore processed was 15,024 kt, consistent with full design capacity. The volume of clay ore mined in 2018 was 6,742 kt, down from 15,072 kt in 2017, as less clay material was stripped to provide access to future sulphide sections. As a result, total ore extraction was 11% lower than the prior year as the reduced clay extraction more than offset the increase in sulphide extraction to feed the main plant. As guided, the average copper grade in sulphide ore processed reduced in 2018, to 0.47% from 0.52% in 2017, but remained above the life of mine average grade of 0.37%. The overall copper recovery rate decreased to 79% from 81% in 2017, due to the increased proportion of clay material processed, which has a lower rate of recovery than sulphide material.

Copper production of 101.6 kt was marginally above the prior year as the increase in processing volumes was broadly offset by lower grades. Full year copper production was in the upper half of the guidance range of 95-105 kt. Gold production of 127.8 koz (2017: 119.0 koz) was ahead of guidance of 115-125 koz, supported by continued high grades. Silver production of 666 koz (2017: 687 koz) was 33% ahead of guidance of around 500 koz.

The majority of copper in concentrate production was dispatched as concentrate to customers in China, with 11.0 kt of material sent for toll processing into cathode at the Balkhash smelter in Kazakhstan, where spare capacity on attractive terms was available.

Copper production in 2019 is forecast to be between 105-115 kt with by-products from gold and silver of between 130-140 koz and around 700 koz respectively. The average copper grade in sulphide ore processed in 2019 is expected to be similar to the 0.47% grade reported in 2018. The clay plant demonstrated in 2018 that it can operate at ore throughput levels above its design capacity of 5 Mtpa however it is a major consumer of water and a programme of upgrades to the process water and reclaim systems is planned to increase recycling rates and significantly reduce its consumption of fresh water. Production from the clay plant has been suspended for a period of 2-3 months whilst the upgrade work is conducted, with minimal impact on overall production at Bozshakol in 2019.

Financial summary

$ million (unless otherwise stated)	**2018**	2017
Gross Revenues[1]	**756**	719
Copper	**596**	572
Gold	**144**	137
Silver	**11**	10
Others	**5**	–
Revenues	**756**	698
Sales volumes[1]		
Copper sales (kt)	**102**	99
Gold sales (koz)	**115**	107
Silver sales (koz)	**724**	617
Gross EBITDA[1]	**520**	515
Capitalised EBITDA	**–**	(12)
EBITDA	**520**	503
Operating profit	**361**	365
Gross cash costs (USc/lb)[1]	**129**	121
Net cash costs (USc/lb)[1]	**58**	54
Capital expenditure	**29**	74
Sustaining	**24**	10
Expansionary	**5**	64

1 The prior year includes the results of clay operations in the period before commercial production.

Gross Revenues

Prior to the achievement of commercial production, revenues and operating costs are capitalised and not recognised in the income statement. In 2017, the income statement therefore excludes the results of clay operations in the first half of the year as commercial production was achieved on 1 July 2017. Gross Revenues and Gross EBITDA include all revenues and operating costs, including periods prior to commercial production.

Gross Revenues increased by 5% to $756 million due to the increase in sales volumes across all products. There was a limited benefit of $3 million from a favourable market price for copper versus the prior year, as sales volumes were weighted to the second half of 2018 when copper prices were lower. Copper sales of 102 kt include 10 kt of copper cathode from material processed at the Balkhash smelter. Revenues recorded in the income statement in 2017 exclude $21 million of capitalised clay revenues from the first half of the year.

EBITDA

Bozshakol contributed Gross EBITDA of $520 million, broadly in line with the prior year, as an increase in Gross Revenues was offset by a small increase in operating costs. A strong EBITDA margin of 69% was maintained.

The gross cash cost is expressed on a unit of copper sales basis, after adjustment for the copper payable and TC/RC terms. As expected, the gross cash cost of 129 USc/lb has increased from 121 USc/lb in the prior year when operations benefited from a higher grade in ore processed, lower maintenance expenditure and lower volumes from the smaller clay operations. The gross cash cost was marginally below market guidance of 130-150 USc/lb. During the year there were some inflationary impacts on local costs, including salaries and certain consumables, however these were partially offset by efficiencies in consumption rates as well as the weakening of the tenge, which traded at an average 345 KZT/$ versus 326 KZT/$ in the prior year. In addition, there was a modest reduction in the annual benchmark TC/RC. After deducting by-product credits, the net cash cost for Bozshakol in 2018 was 58 USc/lb, similar to the 54 USc/lb reported for the prior year as the increase in gross cash costs was partially offset by higher gold and silver sales volumes.

The gross cash cost for 2019 is estimated to be 130-150 USc/lb. The net cash cost in 2019 is forecast to benefit from the sale of around 25 koz of gold bar inventory at the end of 2018, which is being shipped to the National Bank of Kazakhstan over the first half of 2019.

Operating profit

Operating profit of $361 million has reduced slightly from the prior year, as the increase in EBITDA was offset by an additional $17 million of MET charged to the income statement due to higher copper prices and greater clay volumes not capitalised following the achievement of commercial production on 1 July 2017.

Capital expenditure

Sustaining capital expenditure amounted to $24 million, which was higher than the prior year when maintenance requirements were limited, given the early nature of operations. Expenditure in the year mainly related to the overhaul of mining equipment. Maintenance programmes will continue to accelerate into 2019, with total sustaining capital of around $50 million, which includes around $10 million of projects deferred from 2018. In 2018, there was limited expansionary capital expenditure of $5 million, as construction activities are now complete. The final retention payments to contractors of approximately $40 million will be settled in early 2019.

AKTOGAY

Aktogay is a large scale, open pit mine similar to Bozshakol, with a remaining mine life of 27 years at an average copper grade of 0.37% (oxide) and 0.33% (sulphide). Aktogay commenced production of copper cathode from oxide ore in December 2015 and achieved commercial production in July 2016. The production of copper in concentrate from sulphide ore began in the first quarter of 2017 and achieved commercial production on 1 October 2017. The operating sulphide concentrator has an annual ore processing capacity of 25 million tonnes and the sulphide processing capacity will be doubled to 50 million tonnes with the addition of a second concentrator by the end of 2021.

Production summary

kt (unless otherwise stated)	**2018**	2017
Oxide		
Ore extraction	**16,104**	13,040
Copper grade (%)	**0.33**	0.36
Copper cathode production	**25.7**	25.1
Sulphide		
Ore extraction	**25,807**	13,208
Ore processed	**20,766**	12,941
Average copper grade processed (%)	**0.61**	0.66
Recovery rate (%)	**87**	80
Copper in concentrate	**110.6**	68.2
Copper production	**105.7**	65.1
Total copper production	**131.4**	90.2

Silver production (koz)	**489**	270

Copper cathode production from oxide material was 25.7 kt in 2018, above market guidance of 20-25 kt and the prior year output of 25.1 kt. Higher volumes of oxide ore were extracted and placed onto leach pads, to take advantage of available mining capacity. This more than offset a reduction in oxide grade, from 0.36% in the prior year to 0.33%.

Copper production from the sulphide plant increased by 62% to 105.7 kt due to an increase in processing volumes which was supported by higher recoveries. Ore processed increased by 60% to 20,766 kt (2017: 12,941 kt) due to the ramp up of operations. Ore processing in the second half of the year was 17% above the first half, despite scheduled shutdowns for maintenance in both the third and fourth quarters. Ore extraction exceeded the requirements of the concentrator as preparatory stripping works were undertaken to enable the expansion of mining volumes to feed the second concentrator from 2021. A total of 5.2 Mt of lower grade sulphide ore was stockpiled during the year.

The average copper grade in sulphide ore processed in 2018 reduced to 0.61% (2017: 0.66%), although it remains at elevated levels compared to the life of mine grade, due to the persistence of supergene enriched ore. Average copper grades are expected to reduce towards the sulphide resource grade of 0.33% over the first ten years of operations. The copper recovery rate from sulphide ore in 2018 improved to 87%, compared to 80% in 2017 when the plant was in the early stages of ramp up. The majority of copper in concentrate production was dispatched as concentrate to customers in China, whilst 8.1 kt of material was sent for toll processing into cathode at the Balkhash smelter in Kazakhstan where spare capacity on attractive terms was available.

Copper production from sulphide ore of 105.7 kt and copper cathode output from the heap leaching operations of 25.7 kt resulted in total copper production of 131.4 kt, slightly above the 2018 guidance range of 110-130 kt.

Copper production guidance for 2019 is 130-140 kt, consisting of 25 kt of copper cathode from oxide ore and 105-115 kt from sulphide material. Production from sulphide in 2019 is expected to benefit from a full year of processing at close to design capacity, which will be partially offset by an anticipated reduction in grades. Aktogay is also forecast to contribute around 500 koz of silver production, consistent with 2018.

Financial summary

$ million (unless otherwise stated)	2018	2017
Gross Revenues[1]	**775**	530
Revenues	**775**	276
Copper sales (kt)	**130**	87
Gross EBITDA[1]	**530**	374
Capitalised EBITDA	**–**	(185)
EBITDA	**530**	189
Operating profit	**350**	126
Gross cash costs (USc/lb)[1]	**106**	100
Net cash costs (USc/lb)[1]	**103**	98
Capital expenditure	**514**	(27)
Sustaining	**20**	4
Expansionary	**494**	(31)

1 The prior year includes the results of sulphide operations in the period before commercial production.

Gross Revenues

Prior to the achievement of commercial production all revenues and operating costs are capitalised and excluded from the income statement. Commercial production was achieved for sulphide operations on 1 October 2017, therefore the income statement for the prior year includes sulphide operations for the fourth quarter only. Gross Revenues and Gross EBITDA shown in the above table include the pre-commercial production period.

Gross Revenues increased substantially from the prior year to $775 million, reflecting the growth in copper sales volumes resulting from the successful ramp up of the sulphide concentrator. The average LME copper price increased by 6% versus the prior year, however owing to the timing of sales, the realised price impact of copper had a negative $15 million impact on Gross Revenues. In 2017 copper sales volumes were heavily weighted to the second half of the year, when copper prices were high, whilst during 2018 sales volumes were also weighted to the second half, when copper prices were lower. Copper sales included 32 kt of cathode material, primarily from oxide operations but also including a limited quantity of copper concentrate processed at the Balkhash smelter. Aktogay recorded by-product revenues of $11 million, mainly from commercially payable quantities of silver and gold. Revenues recorded in the income statement in 2017 exclude $254 million of capitalised revenues from sulphide operations.

EBITDA

The significant increase in Gross EBITDA to $530 million reflects the rise in revenues associated with the volume growth from the sulphide operations. Similar to Bozshakol, Aktogay has a competitive EBITDA margin of 68%.

Gross cash costs of 106 USc/lb were below market guidance of 110-130 USc/lb. As anticipated there was an increase in gross cash costs as costs began to normalise, following the benefits of higher grades and low maintenance costs in the first year of sulphide operations in 2017. In 2018, three planned shutdowns occurred at the sulphide plant for SAG mill and ball mill relines, with an associated increase in maintenance materials and service charges. In addition, local inflation resulted in higher salary costs and price increases for certain consumables, as well as an increase in the cost of reagents at the oxide operations. These factors more than offset the economies of scale benefit from higher production volumes. Net cash cost, after by-products from commercially payable silver, was 103 USc/lb.

The gross cash cost in 2019 is estimated at 105-125 USc/lb. Grades at the sulphide plant are expected to decrease and maintenance programmes are forecast to accelerate. These factors, as well as tariff and general inflation, will more than offset the economies of scale achieved from an increase in throughput to design capacity during 2019.

Operating profit

The $224 million increase in operating profit to $350 million in the current year is due to the additional contribution from the sulphide operations. This follows the $341 million rise in EBITDA, partially offset by higher MET resulting from a greater volume of ore mined at higher copper prices in addition to increased depreciation following the achievement of commercial production.

Capital expenditure

Sustaining capital was $20 million, mainly relating to the overhaul of mining equipment. Expenditure in the prior year was minimal due to the early stage of operations. Total sustaining capital is forecast to increase towards more normal levels in 2019 as maintenance activities across the mining and processing facilities continue to accelerate. Expenditure of around $50 million is expected in 2019, which includes around $10 million of expenditure deferred from 2018.

Total expansionary capital expenditure of $494 million during the year contains $290 million relating to the original Aktogay project. This includes $281 million paid to the lead contractor in respect of the $300 million deferred from 2016, the balance of which will be settled in early 2019. Other expenditure incurred on the original project relates to the acquisition of further mining fleet and reserve spares to support the ramp up of operations to full capacity. Expansionary capital also includes $204 million for the Aktogay expansion project, in line with market guidance. This includes approximately $100 million of procured equipment, with contracts signed for long lead items for the sulphide concentrator. The project is progressing as planned, with the lead contractor starting earthworks in the second quarter and construction activities in the third quarter.

Total expansionary capital of around $470 million is forecast in 2019. This includes $70 million in respect of the first Aktogay project, largely to expand the heap leach cells. Expenditure on the Aktogay expansion is expected to be around $400 million in 2019, subject to additional financing. First production from the new plant is expected in 2021. The total capital budget for the project is $1.2 billion, with approximately $400 million required in 2020 and $200 million in 2021.

EAST REGION AND BOZYMCHAK

Production summary

Copper

kt (unless otherwise stated)	**2018**	2017
Ore extraction	**3,892**	3,919
Ore processed	**4,030**	4,172
Average copper grade processed (%)	**1.81**	1.89
Average recovery rate (%)	**90**	90
Copper in concentrate	**65.3**	71.0
Copper production	**61.7**	67.0

Copper production in the East Region and Bozymchak reduced by 8% versus the prior year to 61.7 kt, slightly below market guidance of approximately 65 kt. The volume of ore processed reduced by 3% from 4,172 kt to 4,030 kt due to the processing of stockpiled ore from the closed Yubileyno-Snegirikhinsky mine in 2017. The average grade of copper in ore processed decreased to 1.81% (2017: 1.89%), mainly due to lower grades at Orlovsky in 2018.

East Region and Bozymchak copper production in 2019 is expected to be around 55 kt, below 2018 due to a reduction in ore available for processing as the mines mature. Ore extraction at Orlovsky in 2019 will be impacted by difficult geological conditions, with a modest recovery forecast in 2020.

By-products

koz (unless otherwise stated)	**2018**	2017
Zinc bearing ore processed (kt)	**3,028**	3,163
Zinc grade processed (%)	**2.42**	2.65
Zinc in concentrate (kt)	**49.7**	57.6
Gold bearing ore processed (kt)	**4,030**	4,172
Gold grade processed (g/t)	**0.73**	0.76
Gold in concentrate	**58.5**	62.7
Gold production	**55.0**	58.9
Silver bearing ore processed (kt)	**4,030**	4,172
Silver grade processed (g/t)	**33.4**	33.6
Silver in concentrate	**2,590**	2,801
Silver production	**2,356**	2,549

Output of all by-products was lower than the prior year. Zinc in concentrate output of 49.7 kt was 17% below full year guidance of approximately 60 kt, as indicated in the Group's third quarter production report. Zinc production in 2018 has been impacted by lower than forecast grades at the Artemyevsky mine, where extraction was limited with development works ongoing to access a second ore body for the extension project.

Full year gold production of 55.0 koz was above the external guidance of 45-50 koz. The majority of outperformance was driven by the Bozymchak mine in Kyrgyzstan, where the average gold grade was 1.55 g/t (2017: 1.64 g/t), average recovery rates improved to 84.6% (2017: 82.4%) and ore processing was maintained at 1,002 kt (2017: 1,009 kt), delivering full year gold output of 39.7 koz (2017: 41.3 koz).

Silver production of 2,356 koz for the year represents a reduction of 8% compared to 2017, due to lower processing volumes as well as lower grades from the Bozymchak mine. Silver production was 18% ahead of market guidance of around 2,000 koz.

East Region and Bozymchak is forecast to produce 40-45 koz and around 1,800 koz of gold and silver production respectively in 2019. Zinc in concentrate production will be in the region of 50 kt.

Financial summary

$ million (unless otherwise stated)	**2018**	2017
Revenues	**631**	689
Copper	**417**	433
Zinc	**101**	115
Gold	**68**	79
Silver	**37**	51
Other	**8**	11
Sales volumes		
Copper sales (kt)	**64**	70
Zinc sales (kt)	**50**	57
Gold sales (koz)	**54**	62
Silver sales (koz)	**2,362**	2,979
EBITDA	**284**	371
Operating profit	**165**	266
Gross cash costs (USc/lb)	**244**	208
Net cash costs (USc/lb)	**94**	42
Capital expenditure	**70**	74
Sustaining	**40**	52
Expansionary	**30**	22

Revenues

Revenues generated by East Region and Bozymchak decreased by 8% to $631 million as a result of lower sales volumes across all products. Copper revenues fell by $16 million as a 9% reduction in sales volumes was partially offset by a 6% improvement in the average LME copper price. Revenues from by-products were $42 million below the prior year driven by lower volumes as well as a lower silver price.

EBITDA

EBITDA reduced by $87 million, reflecting a $58 million reduction in revenues as well as an increase in cash operating costs. Cash operating costs of $347 million increased by $29 million from the prior year, despite lower production and a weakening of the tenge, as inflationary pressures included a rise in salaries following a period of muted growth since the devaluation of the tenge in 2015. Market prices for raw materials, including fuel and railway tariffs, have also risen. At Bozymchak, operating costs have increased due to higher maintenance costs as the operation matures whilst mining costs have risen owing to longer haul distances. Operating costs in 2018 also include a $9 million impairment for VAT in the East Region.

As a result, the gross cash cost of copper for East Region and Bozymchak of 244 USc/lb was 17% above the prior year, but in line with market guidance of 230-250 USc/lb. Net cash costs increased from 42 USc/lb to 94 USc/lb due to the increase in gross cash cost combined with a reduction in by-product sales volumes and a lower market price for silver.

Gross cash costs for 2019 are estimated to increase to around 260-280 USc/lb, mainly due to a further reduction in copper sales volumes to circa 55 kt.

Operating profit

Operating profit of $165 million was $101 million lower than the prior year due to the reduction in EBITDA as well as a $20 million impairment to Bozymchak following adverse court rulings relating to the recovery of VAT incurred on construction costs. This was partially offset by lower depreciation and the absence of impairment charges recorded within special items in 2017.

Capital expenditure

Sustaining capital expenditure of $40 million was below market guidance of around $50 million and lower than the prior year, which included certain projects deferred from previous years. Expenditure in the year relates to mine development works across the underground mines, the purchase of mine equipment, expansion of tailings facilities and maintenance of support infrastructure. In 2019 sustaining capital requirements for the East Region and Bozymchak are forecast to be around $50 million, including some expenditure deferred from 2018.

Expansionary capital expenditure of $30 million predominantly relates to the extension of the Artemyevsky mine, including initial development works to develop a ventilation shaft. Expansionary capital in 2019 is expected to be around $70 million and will require around $60 million per annum from 2020 to 2022, with limited spend thereafter.

Other projects

On 22 January 2019 the Group announced the Initial Completion of the acquisition of the Baimskaya copper project. During 2019 the Group will progress a bankable feasibility study of the project with expected expenditure of around $70 million. Initial spend on site infrastructure may be considered later in the year. Fluor has been appointed as the lead contractor for the feasibility study and work has commenced. The results of the feasibility study, including guidance on the timing of capital expenditure, production volumes, operating costs and sustaining capital expenditure are expected to be announced in the first half of 2020. In parallel with the feasibility study, the Group will continue discussions with banks on financing the construction phase and evaluate the potential for partnering.

On 8 June 2018 the Group announced an investment of $70 million from NFC for a 19.4% holding in the Koksay project. $25 million was received in December 2018 as a prepayment to fund ongoing activities and the balance is expected to be settled in the first half of 2019. The $70 million is to be used 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. Approximately $20 million is expected to be spent on feasibility work in 2019.

FINANCIAL REVIEW

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 condensed consolidated financial statements for the year ended 31 December 2018, including the application of IFRS 15 '*Revenue from Contracts with Customers*' and IFRS 9 '*Financial Instruments*' which were applicable from 1 January 2018.

The Aktogay sulphide and Bozshakol clay plants were in pre-commercial production until 1 October 2017 and 1 July 2017 respectively. During the pre-commercial production phase, revenues and operating costs were capitalised within property, plant and equipment as part of the cost of construction and not included in the income statement. The Financial review and note 4(a)(i) to the condensed consolidated financial statements include the non-IFRS measures Gross Revenues and Gross EBITDA, which incorporate the results of the Aktogay sulphide and Bozshakol clay plants during pre-commercial production, to provide measures of their performance over the full year 2017 and as a comparative for 2018.

Income statement

An analysis of the consolidated income statement is shown below:

$ million (unless otherwise stated)	**2018**	2017
Gross Revenues[1]	**2,162**	1,938
Gross EBITDA[1]	**1,310**	1,235
Revenues	**2,162**	1,663
Cash operating costs	**(852)**	(625)
EBITDA[1]	**1,310**	1,038
Less: MET and royalties	**(200)**	(132)
Less: depreciation, depletion and amortisation	**(239)**	(172)
Less: special items	**(20)**	(19)
Operating profit	**851**	715
Net finance costs	**(209)**	(135)
Profit before tax	**642**	580
Income tax expense	**(132)**	(133)
Profit for the year	**510**	447
Non-controlling interests	**–**	–
Profit attributable to equity holders of the Company	**510**	447
Earnings per share attributable to equity shareholders of the Company		
Ordinary EPS – basic and diluted ($)	**1.14**	1.00
EPS based on Underlying Profit – basic and diluted ($)[1]	**1.18**	1.07

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 54.

Gross Revenues and Revenues

Gross Revenues for 2018 were $2,162 million, an increase of $224 million from the prior year, mainly due to higher copper volumes from the Aktogay sulphide and Bozshakol clay plants as they ramped up to design capacity and from an improved average LME copper price. The total copper sold in 2018 was 296 kt versus 256 kt in 2017, mainly due to higher throughput at the Aktogay sulphide plant. The LME copper price averaged $6,526 per tonne in 2018, up from $6,163 per tonne in the prior year. The average realised price of copper increased only marginally to $6,002 per tonne from $5,992 per tonne in 2017, despite the 6% higher LME copper price, due to a greater proportion of copper concentrate sales which amounted to 64% in the current year (2017: 56%) and are priced to include the deduction of treatment and refining charges.

Revenues recognised in the income statement increased by 30% to $2,162 million reflecting the inclusion of a full year of sales from the Aktogay sulphide and Bozshakol clay plants in 2018, which were capitalised in the prior year during pre-commercial production. Revenues capitalised during the pre-commercial production period in 2017 amounted to $254 million and $21 million for the Aktogay sulphide and Bozshakol clay plants respectively.

Gross Revenues from by-products were $385 million compared to $406 million in the prior year, impacted by lower zinc and silver revenues due to reduced output from the East Region operations. Gold revenues were $212 million, slightly below the $216 million recorded in 2017, due to lower output from the East Region and Bozymchak. By-products comprised 18% of Gross Revenues in 2018 versus 21% in the prior year, due to growth in Aktogay volumes which contain a smaller proportion of by-products.

Further information on Gross Revenues and 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 note 4 to the condensed consolidated financial statements.

Operating profit and EBITDA

The operating profit for 2018 was $851 million compared to $715 million in 2017, primarily due to the growth in sales volumes from the Aktogay sulphide plant. The Group's operating profit margin, measured as operating profit divided by revenues, reduced slightly to 39% in the current year from 43% in 2017. The reduction in margin was mainly due to an impairment of $20 million recognised against Bozymchak, combined with lower production, inflationary cost increases and a $9 million impairment of VAT at the East Region. Within operating profit, the Group's cost of sales and selling and distribution expenses rose mainly due to additional volumes from the Aktogay sulphide and Bozshakol clay plants, for which the associated costs were capitalised ahead of commercial production in 2017, and a higher depreciation charge following a full year of commercial operations at Aktogay sulphide.

Gross EBITDA for the Group rose by 6% to $1,310 million due to the increase in Gross Revenues attributed mainly to the higher volumes from the Aktogay sulphide plant partly offset by the impact of lower volumes from the East Region and Bozymchak operations. The Gross EBITDA margin for the Group decreased from 64% in 2017 to 61% in 2018 due to the impact of higher unit costs at East Region and Bozymchak including the $9 million impairment of VAT.

The increase in EBITDA from $1,038 million in the prior year to $1,310 million was mainly attributed to higher Aktogay sales volumes from the sulphide plant.

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

Items excluded from EBITDA

MET and royalties

The MET and royalties charge in the income statement rose from $132 million in 2017 to $200 million in 2018. This reflects the increased metal in ore mined to support the ramp up of Aktogay sulphide operations and higher average LME copper prices, partly offset by lower grade ore and reduced ore volumes mined at Bozshakol. In 2017, $26 million of MET relating to the Aktogay sulphide and Bozshakol clay plants was incurred during pre-commercial production and capitalised to property, plant and equipment.

The total MET and royalties incurred was $207 million compared to $196 million in the prior year with the rise attributable to the increased ore mined at the Aktogay sulphide operations and the impact of higher LME copper prices. The difference between the MET and royalties charge in the income statement and incurred reflects MET included in unsold inventories on the balance sheet, mostly within current assets.

Depreciation, depletion and amortisation

Depreciation, depletion and amortisation in 2018 of $239 million is higher than the $172 million incurred in 2017, as depreciation of the Aktogay sulphide and Bozshakol clay assets only commenced in the second half of 2017, upon achievement of commercial production.

Special items

Special items are non-recurring or variable in nature and do not impact the underlying trading performance of the Group.

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. 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, which was determined as its fair value less cost to sell on a discounted cash flow basis at 31 December 2018.

In the prior year the Group determined that it would not progress a project to construct a copper smelter in Kazakhstan and the associated feasibility study costs totalling $16 million were expensed as a special item. An impairment charge of $4 million at the East Region and Bozymchak in respect of property, plant and equipment was also recognised in 2017 within special items.

Net finance costs

Net finance costs include:

$ million	**2018**	2017
Interest income	**33**	17
Total interest incurred	**(240)**	(246)
Interest capitalised	**4**	88
Interest expense	**(236)**	(158)
Interest on employee obligations and unwinding of discounts	**(6)**	(7)
Fair value (losses)/gains on debt related derivative financial instruments	**(3)**	13
Net interest expense	**(245)**	(152)
Net foreign exchange gains	**3**	–
Net finance costs	**(209)**	(135)

Net finance costs were $209 million compared to $135 million in 2017.

The total interest incurred amounted to $240 million and was $6 million lower than the $246 million incurred in the prior year. In 2017, the total interest incurred included $10 million of PXF fees related to the refinancing of that facility and a $15 million discount unwind on the NFC deferral (see note 14) which decreased to $1 million in 2018, after $281 million of the $300 million deferred was settled in the year. Interest on borrowings included within total interest incurred increased to $239 million compared to $221 million in the prior year, mainly due to higher US dollar LIBOR rates in 2018, partly offset by the repayment of debt facilities.

Interest expense recognised in the income statement of $236 million was higher than the $158 million reported in 2017, as interest on the borrowings to finance the Aktogay sulphide and Bozshakol clay plants was capitalised to the cost of the project in the prior year until the achievement of commercial production. Capitalised interest of $4 million in 2018 reflects financing costs incurred on the Group's general borrowings used to fund the Aktogay expansion project.

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 on the Group's tax charge.

$ million (unless otherwise stated)	**2018**	2017
Profit before tax	**642**	580
Add: MET and royalties	**200**	132
Add: special items	**20**	29
Adjusted profit before tax	**862**	741
Income tax expense	**132**	133
Add: MET and royalties	**200**	132
Less: recognition of deferred tax liability on special items	**–**	–
Adjusted tax expense	**332**	265
Effective tax rate (%)	**21**	23
All-in effective tax rate[1] (%)	**39**	36

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.

Effective tax rate

The effective tax rate in 2018 was 21%, which was lower than the prior year rate of 23%, mainly due to a reduction in non-deductible expenses at the Group's Kazakhstan operations and 2017 including income tax adjustments in respect of the prior years.

All-in effective tax rate

The increase in the all-in effective tax rate to 39% from 36% in the prior year is mainly due to a higher MET and royalties charge, as a greater proportion of MET was expensed in the current year, whereas in 2017 MET associated with extraction during the pre-commercial production periods of the Aktogay sulphide and Bozshakol clay plants was capitalised.

Net profit attributable to the equity holders of the Company and Underlying Profit

A reconciliation of Underlying Profit from profit attributable to equity holders of the Company is set out below:

$ million (unless otherwise stated)	**2018**	2017
Net profit attributable to equity holders of the Company	**510**	447
Special items within operating profit, net of tax – note 6	**20**	19
Special items within profit before taxation, net of tax – PXF fees	**–**	10
Underlying Profit[1]	**530**	476
Weighted average number of shares in issue (million)	**447**	447
Ordinary EPS – basic and diluted ($)	**1.14**	1.00
EPS based on Underlying Profit – basic and diluted ($)[1]	**1.18**	1.07

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 54.

The Group's net profit attributable to equity holders of the Company was $510 million in 2018 compared to $447 million in the prior year. This was mainly due to increased operating profit, partly offset by interest costs on project borrowings which were expensed in the current year but capitalised in 2017, prior to the achievement of commercial production.

Underlying Profit rose to $530 million in 2018 versus $476 million recorded in the prior year, following the increase in net profit.

EPS and EPS based on Underlying Profit

Basic earnings per share of $1.14 increased from $1.00 in 2017, whilst earnings per share based on Underlying Profit rose to $1.18 from $1.07.

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 2018 the Company paid an interim dividend of 6.0 US cents per share equating to an interim payment of $27 million, marking the successful delivery of the cash generative Aktogay and Bozshakol operations. As a result of the Group's strong performance in the year, the Board has recommended a final dividend for 2018 of 6.0 US cents per share, equivalent to a payment of $28 million. Combined with the interim dividend of 6.0 US cents per share, the dividend in respect of the 2018 financial year is 12.0 US cents per share.

On 22 January 2019, the Group announced the Initial Completion of the acquisition of the Baimskaya copper project. The financing requirements of the project construction including capital budget, phasing, sources of funding and partnering options will be assessed during the feasibility study expected to be completed in the first half of 2020, following which the Board will further review the Group's allocation of capital.

The distributable reserves of KAZ Minerals PLC at 31 December 2018 were $1,385 million.

Cash flows

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

$ million	**2018**	2017
EBITDA[1]	**1,310**	1,038
Change in inventories[2]	**(138)**	(37)
Change in prepayments and other current assets[2]	**(30)**	(41)
Change in trade and other receivables[2]	**4**	27
Change in trade and other payables and provisions[2]	**49**	11
Interest paid	**(229)**	(222)
MET and royalties paid[2]	**(208)**	(151)
Income tax paid	**(95)**	(110)
Foreign exchange and other movements	**7**	5
Net cash flows from operating activities before capital expenditure and non-current VAT associated with major projects[3]	**670**	520
Sustaining capital expenditure	**(85)**	(68)
Free Cash Flow[1]	**585**	452
Expansionary and new project capital expenditure[4]	**(530)**	(69)
Net non-current VAT received associated with major projects	**3**	232
Proceeds from disposal of property, plant and equipment	**–**	1
Interest received	**32**	16
Dividends paid	**(27)**	–
Other investments	**10**	–
Other movements	**(3)**	(1)
Cash flow movement in net debt	**70**	631

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 54.
2 Excludes working capital and MET movements arising from pre-commercial production activities at the Bozshakol and Aktogay operations in 2017.
3 The difference between 'net cash flow from operating activities before capital expenditure and non-current VAT associated with major projects' and 'net cash from operating activities' as reflected on the Group cash flow statement, is the VAT received on the construction of the major projects.
4 Expansionary and new project capital expenditure includes operating cash flows relating to pre-commercial production activities in 2017, as explained further below.

Summary of the year

Net cash flows from operating activities before capital expenditure and non-current VAT associated with major projects improved to $670 million due to increased profits, partly offset by additional working capital requirements and higher MET payments due to the rise in commodity prices and a greater volume of sulphide ore mined at Aktogay. The MET paid in the prior year excludes $38 million capitalised to property, plant and equipment ahead of commercial production at the Aktogay sulphide and Bozshakol clay plants.

Working capital

- Inventory levels rose by $138 million primarily related to the acquisition of consumables and spare parts to support the ramp up of Bozshakol and Aktogay. A conservative approach has been taken to support sustained output as an operating history is established. However 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. In addition there was a larger finished goods inventory at Bozshakol and East Region and Bozymchak, due to the timing of sales. The $158 million increase in inventory shown in the IFRS based cash flow statement (see note 15) includes MET and depreciation, which are excluded from the cash flow above, as MET is reflected separately and EBITDA is stated before depreciation and amortisation;
- Prepayments and other current assets increased by $30 million primarily due to an increase in operating VAT receivable at the Aktogay operations following its ramp up to design capacity and advances paid for goods and services. During the year, $91 million of VAT was refunded to the East Region, Bozshakol and Aktogay operations;
- Trade and other receivables decreased by $4 million mostly due to the impact of lower copper prices in the second half of the year. Further details relating to the nature of the Group's customers are given in note 4(b) to the condensed consolidated financial statements; and
- Trade and other payables and provisions increased by $49 million due to increased credit purchases of raw materials to support the ramp up to design capacity at the new operations and $32 million of additional customer receipts in advance of product deliveries. The difference to trade and other payables shown in the IFRS based cash flow statement (see note 15) reflects the change in MET and royalties payable over the year, if any. The cash flow above contains MET and royalties payments as a separate line item.

In 2017, inventory levels rose by $37 million due to higher consumables needed to support the operational ramp up of Aktogay and Bozshakol and from an increase in finished goods in transit to customers. Trade and other receivables decreased by $27 million due to lower volumes at Bozshakol in December following repairs in November, while prepayments and other current assets increased by $41 million due to a higher operating VAT receivable at Aktogay and Bozshakol operations. Trade and other payables increased by $11 million due to higher operational spend at Aktogay and Bozshakol and from lower customer advances received ahead of product delivery.

The working capital movements in 2017 exclude the period of pre-commercial production at the Aktogay sulphide and Bozshakol clay plants, which were capitalised as part of the cost of construction and were included within expansionary and new project capital expenditure. These included outflows of $29 million for consumables and inventory at Aktogay and $35 million for clay ore stockpiled at Bozshakol, in addition to a $52 million increase in trade and other receivables and prepayments at both operations, partly offset by increased accounts payable of $6 million and MET payable of $12 million. There were no pre-commercial production working capital cash flows included within expansionary capital expenditure in 2018.

Interest cash flows

Interest paid during the year was $229 million compared with $222 million in 2017 which included PXF fees of $10 million. Interest paid is broadly consistent with the higher borrowing costs incurred during the year of $239 million and above the prior year mainly due to increased LIBOR interest rates. Interest payments are made semi-annually under the CDB Bozshakol/Bozymchak, CDB Aktogay and DBK US dollar facilities, quarterly under the CDB Aktogay RMB facility and monthly under the PXF facility.

Income taxes and MET

Income tax payments of $95 million (2017: $110 million) include $41 million (2017: $48 million) of withholding tax on interest accrued in previous years for financing the major projects. Excluding withholding tax payments, taxes paid were below the income statement charge of $132 million (2017: $133 million) due to capital allowances and utilisation of available tax losses at Aktogay and Bozshakol. At 31 December 2018, the Group's net income tax receivable was $7 million, compared to a $2 million income tax payable in 2017.

MET and royalties payments increased to $208 million (2017: $151 million) as a result of the higher charge at the Aktogay and Bozshakol operations. In 2017, prior to commercial production at the Aktogay sulphide and Bozshakol clay plants, $38 million of MET and royalties paid was reflected within expansionary capital expenditure. Once adjusted for the impact of capitalised MET paid in 2017, the increased MET in the current year is attributable to a greater volume of ore mined and higher copper prices. At 31 December 2018, MET and royalties payable was $48 million compared to $55 million at 31 December 2017.

Free Cash Flow

The Group's Free Cash Flow before interest payments on borrowings was $814 million compared to $674 million in 2017 following the higher profits recorded by the Group. After interest payments, Free Cash Flow was $585 million compared to $452 million in the prior year.

Capital expenditure

Sustaining capital expenditure increased to $85 million in 2018 from $68 million in the prior year, as maintenance spend at Bozshakol and Aktogay was $30 million higher, following the ramp up of operations, partly offset by lower expenditure at the East Region and Bozymchak.

Expansionary and new project expenditure of $530 million in 2018 includes $281 million paid in 2018 in respect of the $300 million Aktogay NFC deferral, $213 million invested at Aktogay, mainly on the expansion project and $28 million incurred on the Artemyevsky mine extension in the East Region. This compares to $69 million of expansionary capital expenditure recorded in 2017, which was net of $127 million in operating cash inflows capitalised ahead of commercial production at the Aktogay sulphide and Bozshakol clay plants. In 2017, a total of $196 million was spent mainly on construction of the Group's major growth projects and the East Region, of which $64 million related to investments in consumables, inventory and the stockpiling of ore at the Aktogay sulphide and Bozshakol clay plants ahead of commercial production. Please refer to the Operating review for an analysis of the Group's capital expenditure by operating segment.

Non-current VAT

The net non-current VAT received of $3 million (2017: $232 million) relates to VAT previously incurred during the construction of Aktogay and Bozshakol.

Other investments

In 2018, other investing cash flows include the receipt of $25 million advance consideration in respect of NFC's equity investment in Koksay (see Investments below) and $15 million of advances paid to fund studies on the Baimskaya copper project.

Balance sheet

Equity attributable to owners of the Company at 31 December 2018 was $1,050 million (2017: $995 million), an increase of $55 million as the Group's attributable profit for the year of $510 million (2017: $447 million) was offset by a decrease in the US dollar value of the Group's foreign currency operations of $428 million (2017: increase of $8 million) and dividends of $27 million paid in October (2017: $nil). There was a 16% decrease in the value of the tenge from 31 December 2017 to 31 December 2018. The Group's mining assets are largely held within Kazakhstan-based entities which maintain tenge as their functional currency. At period ends, these non-monetary assets are consolidated and reported in US dollars at the closing exchange rate with the change in value arising from movements in the tenge exchange rate reflected in equity and not through the income statement. The weaker tenge should have a positive effect on their underlying economic value as it reduces local operating costs, whilst revenues are largely US dollar based. The Group's external liabilities, principally bank debt, are mainly US dollar denominated and not affected by movements in the KZT/$ exchange rate.

Net debt

A summary of the Group's net debt position is shown below:

$ million	2018	2017
Cash and cash equivalents and current investments	**1,469**	1,821
Less: restricted cash[1]	**(2)**	–
Borrowings	**(3,453)**	(3,877)
Net debt[2]	**(1,986)**	(2,056)

1 Cash at bank at 31 December 2018 of $2 million (2017: $nil) was restricted by legal or contractual arrangements. These amounts are excluded from the Group's measure of net debt.
2 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 54.

Cash and cash equivalents and current investments at 31 December 2018 totalled $1,469 million, which was below the $1,821 million at 31 December 2017 mainly due to the settlement of $281 million of the $300 million NFC deferral, expansionary spend on the Aktogay expansion project of $204 million and repayment of the Group's debt of $424 million. This was partly offset by a Free Cash Flow of $585 million.

To manage counterparty and liquidity risk, surplus funds within the Group are held predominantly in the UK, with funds held in Kazakhstan utilised mainly for working capital purposes. The funds within the UK are held primarily with major European and US financial institutions and triple-'A' rated liquidity funds. At 31 December 2018, $1,439 million of cash and cash equivalents and current investments were held in the UK and Europe and $30 million in Kazakhstan and Kyrgyzstan.

At 31 December 2018, borrowings (net of unamortised fees) were $3,453 million, a decrease of $424 million from 31 December 2017 reflecting $183 million in principal repayments of the CDB Bozshakol/Bozymchak finance facility, $12 million paid under the CDB Aktogay RMB facility, $108 million paid under the CDB Aktogay USD facility, $21 million paid in respect of the DBK Aktogay loan and $100 million paid in respect of the PXF loan. The borrowings (net of unamortised fees) consisted of $1,345 million under the CDB Bozshakol/Bozymchak facilities, $1,331 million under the CDB Aktogay finance facilities, $277 million under the DBK facility and $500 million under the PXF debt facility.

Further details of the terms of the Group's borrowings are included in note 13 of the condensed consolidated financial statements.

Investments

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 $436 million in cash and 22.3 million new KAZ Minerals shares, which were allotted to the vendor. $50 million of the $436 million cash consideration has been withheld pending the release of a guarantee agreement made by the acquired entity which is the legal owner of the Baimskaya licence. The final cash payment of $50 million is expected to be settled in 2019. 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 purchase will be accounted for in 2019 as an asset acquisition, with the principal value attributed to the mining licence, shown within mining assets.

On 8 June 2018, the Group completed an agreement for NFC to invest $70 million for a 19.4% equity stake in Koksay B.V., the parent company of the entity which holds the mining licence in Kazakhstan. The Group received $25 million of consideration in advance in December 2018. The remaining investment of $45 million will be settled, on completion of the transaction, in the first half of 2019. The $70 million to be invested by NFC will be solely used 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 then review the results of the feasibility study to assess how and when to proceed with the project.

Hong Kong listing

On 1 August 2018, the Group delisted from the Hong Kong Stock Exchange. The Group retains its primary listings on the London and Kazakhstan Stock Exchanges.

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 Group's funding strategy is to obtain a new financing facility which the Group's forecasts show is required to finance the construction of the Aktogay expansion. The Board is confident of raising additional liquidity through a combination of new sources of finance and/ or a refinance of debt facilities given the quality of the Group's long-term low cost assets, the low risk nature of the Aktogay expansion and the level of amortisation of existing debt facilities during the period. The Board expects a new facility, in the region of $600 million, to be completed during the first half of 2019 to support the Aktogay expansion.

Assuming additional liquidity is committed as expected, 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. There can however be no guarantee that the new liquidity can be secured as expected. In the unlikely event that no new additional financing can be secured, mitigating actions will be taken to defer planned capital expenditure, to ensure the Group has adequate liquidity throughout the going concern period. In the severe downside scenarios of sustained lower than expected commodity prices with lower production; and sustained lower prices, lower production and higher operating costs, the Group's forecasts indicate that mitigating actions, including a deferral of construction of the Aktogay expansion, would be required by the end of the first half of 2019 if new financing is not obtained. Whilst these scenarios are considered unlikely, the Board considers taking such mitigating steps to be feasible. Accordingly, the Board is satisfied that it is appropriate to adopt the going concern basis of accounting in the preparation of these condensed consolidated financial statements.

PRINCIPAL RISKS

Managing our risks

The Group's principal risks are set out below, along with mitigating actions. There may be other risks, unknown or currently considered immaterial, which might 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.

SUSTAINABILITY RISKS

Health and safety

Impact

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 entering a period of more intense construction activity, increasing potential health and safety exposures.

Mitigation

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. Additional measures are being taken to mitigate identified health and safety risks associated with major construction works such as at Aktogay and Artemyevsky, in particular the supervision of activities performed by on site contractors.

The HSE Committee reviews and monitors associated risks across the Group. Further details of the HSE function are set out in the Corporate responsibility report.

Community and labour relations

Impact

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.

Mitigation

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 complying with commitments the Group minimises potentially negative impacts. Bozshakol and Aktogay are in remote locations where the community relations risk is reduced. As part of the due diligence process for the Baimskaya acquisition the Group 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 Corporate responsibility report.

Employees

Impact

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.

Mitigation

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. The Group is investing in training resources to support the workforce requirement for the Aktogay expansion. International workers with appropriate expertise assist during the initial phase of operations.

Environmental

Impact

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.

Mitigation

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.

Further details are set out in the Corporate responsibility report.

OPERATIONAL RISKS

Business interruption

Impact

Operations are subject to a number of risks not wholly within the Group's control, including: geological and technological challenges; weather and 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.

Mitigation

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 an outage occur at the Balkhash smelter the Group believes it could sell concentrate directly to customers.

New projects and commissioning

Impact

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 effectively manage new projects 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 recently acquired Baimskaya copper project, including its remote location, the delivery of government support for infrastructure, obtaining certain tax incentives and local weather conditions.

Mitigation

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.

The Group performed a detailed due diligence exercise, led by its experienced projects team and supported by external consultants, prior to the acquisition of Baimskaya. An international standard pre-feasibility study has been performed by Fluor and the mine plan is based on a JORC resource.

The acquisition was structured with Deferred Consideration to incentivise the Vendor, as a local partner, to assist in the delivery of the project.

Further details of the major growth projects are included in the Operating review.

Reserves and resources

Impact

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.

Mitigation

The Group's ore reserves and mineral resources are published annually in accordance with the criteria of the JORC Code and reviewed by an independent technical expert. 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.

Political

Impact

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.

Following the acquisition of Baimskaya the Group is now exposed to political risks associated with operating in Russia, a new jurisdiction for the Group.

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.

Mitigation

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 is one of the most politically stable and economically developed countries in Central Asia and the Board continues to view the political, social and economic environment within Kazakhstan favourably and remains optimistic about the conditions for business in the region. In Russia, the Baimskaya acquisition was structured with Deferred Consideration to incentivise the Vendor, as a local partner, to assist in the delivery of the project. Prior to the acquisition, the Group engaged with the Russian government at different levels and has subsequently maintained an ongoing dialogue.

Legal and regulatory compliance

Impact

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.

Mitigation

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. The Group's corporate policies are being applied in Russia where a dedicated team is managing legal and regulatory compliance.

FINANCIAL RISKS

Commodity price

Impact

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 world supply and demand and investor sentiment.

The imposition of trade tariffs between the US and China in 2018 have negatively impacted the Chinese economy and its outlook. China is the largest market for copper and the trade tariffs have had a negative impact on copper prices and their near-term outlook.

Mitigation

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.

Sensitivity analysis to movements in commodity prices is included in the Market overview.

Foreign exchange and inflation

Impact

Fluctuations in rates of exchange or inflation in the jurisdictions to which the Group is exposed could result in future increased costs. The Group will be exposed to fluctuations in the Russian rouble, which may affect the capital cost associated with the development of Baimskaya.

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.

Mitigation

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.

Exposure to China

Impact

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 $2.7 billion at 31 December 2018. In addition, the Group uses contractors, services and materials from China.

The imposition of trade tariffs between the US and China in 2018 have negatively impacted the Chinese economy and its outlook. A slowdown in the Chinese economy could impact the availability of Chinese credit and its demand for commodities, both important to the Group.

Mitigation

Bozshakol and Aktogay 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, having the PXF and DBK facilities in place and has the flexibility to consider other sources of capital if required.

Acquisitions and divestments

Impact

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 $900 million acquisition of the Baimskaya copper project represents a material acquisition for the Group.

The 2014 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 in 2014, which could give rise to liabilities for KAZ Minerals.

Mitigation

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.

The due diligence on the Baimskaya acquisition was led by the Group's experienced project team, supported by external consultants, the results of which were reported on an on-going basis to the Board.

Liquidity

Impact

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 and its development 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.

Mitigation

Forecast cash flows are closely monitored and the financing strategy is set by the Board. Adequate levels of committed funds are maintained with $1,469 million cash and cash equivalents and current investments at 31 December 2018. 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 will continue discussions with banks on financing the construction phase and evaluate the potential for partnering.

Further details regarding going concern are included in note 2 to the financial statements.

CONSOLIDATED STATEMENT OF TOTAL COMPREHENSIVE INCOME

Year ended 31 December 2018

$ million (unless otherwise stated)	Notes	**2018**	2017
Revenues	4(b)	**2,162**	1,663
Cost of sales		**(1,077)**	(755)
Gross profit		**1,085**	908
Selling and distribution expenses		**(94)**	(69)
Administrative expenses		**(115)**	(108)
Net other operating income		**4**	4
Impairment losses	5	**(29)**	(20)
Operating profit		**851**	715
Analysed as:			
Operating profit (excluding special items)		**871**	734
Special items	6	**(20)**	(19)
Finance income	7	**33**	30
Finance costs	7	**(245)**	(165)
Net foreign exchange gain		**3**	–
Profit before tax		**642**	580
Income tax expense	8	**(132)**	(133)
Profit for the year		**510**	447
Analysed as:			
Underlying Profit	9	**530**	476
Special items	6	**(20)**	(29)
Attributable to:			
Equity holders of the Company		**510**	447
Non-controlling interests		**–**	–
		510	447
Other comprehensive (expense)/income for the year after tax:			
Items that may be reclassified subsequently to the income statement:			
Exchange differences on retranslation of foreign operations		**(427)**	8
Items that will never be reclassified to the income statement:			
Actuarial gain on employee benefits, net of tax		**–**	1
Other comprehensive (expense)/income for the year		**(427)**	9

Total comprehensive income for the year		**83**	456
Attributable to:			
Equity holders of the Company		**82**	456
Non-controlling interests		**1**	–
		83	456
Earnings per share attributable to equity shareholders of the Company			
Ordinary EPS – basic and diluted ($)	9	**1.14**	1.00
EPS based on Underlying Profit – basic and diluted ($)	9	**1.18**	1.07

CONSOLIDATED BALANCE SHEET

At 31 December 2018

$ million	Notes	2018	2017
Assets			
Non-current assets			
Intangible assets		**6**	7
Property, plant and equipment		**2,130**	2,535
Mining assets		**432**	438
Other non-current assets	11	**301**	170
Deferred tax asset		**28**	65
		2,897	3,215
Current assets			
Inventories		**439**	359
Prepayments and other current assets		**90**	82
Income taxes prepaid		**18**	13
Trade and other receivables		**127**	132
Current investments	15(c)	**250**	–
Cash and cash equivalents	15(b)	**1,219**	1,821
		2,143	2,407
Total assets		**5,040**	5,622
Equity and liabilities			
Equity			
Share capital	12(a)	**171**	171
Share premium		**2,650**	2,650
Capital reserves	12(c)	**(2,457)**	(2,029)
Retained earnings		**686**	203
Attributable to equity holders of the Company		**1,050**	995
Non-controlling interests		**4**	3
Total equity		**1,054**	998
Non-current liabilities			
Borrowings	13	**2,914**	3,459
Deferred tax liability		**76**	70
Employee benefits		**12**	14
Provision for closure and site restoration		**58**	67
Other non-current liabilities	14	**7**	7
		3,067	3,617
Current liabilities			
Trade and other payables		**320**	272
Borrowings	13	**539**	418
Income taxes payable		**11**	15
Employee benefits		**2**	2
Provision for closure and site restoration		**1**	–
Other current liabilities	14	**46**	300
		919	1,007
Total liabilities		**3,986**	4,624
Total equity and liabilities		**5,040**	5,622

CONSOLIDATED STATEMENT OF CASH FLOWS

Year ended 31 December 2018

$ million	Notes	2018	2017
Operating activities			
Cash receipts from customers		**2,198**	1,640

	Notes	2018	2017
Net proceeds on non-current VAT		**3**	232
Cash payments to employees, suppliers and taxes other than non-current VAT and income tax		**(1,204)**	(788)
Cash flows from operations before interest and income taxes paid	15(a)	**997**	1,084
Interest paid		**(229)**	(222)
Income taxes paid		**(95)**	(110)
Net cash flows from operating activities		**673**	752
Investing activities			
Interest received		**32**	16
Proceeds from disposal of property, plant and equipment and mining assets		**–**	1
Purchase of intangible assets		**(2)**	(2)
Purchase of property, plant and equipment		**(567)**	(92)
Investments in mining assets, including licences		**(46)**	(43)
Licence payments for subsoil contracts		**(2)**	(1)
Additions to long-term bank deposits		**(1)**	–
Baimskaya advances		**(15)**	–
Net additions to current investments	15(c)	**(250)**	–
Advance consideration for investment in Koksay		**25**	–
Net cash flows used in investing activities		**(826)**	(121)
Financing activities			
Proceeds from borrowings	15(c)	**–**	376
Repayment of borrowings	15(c)	**(424)**	(294)
Dividends paid by the Company	10	**(27)**	–
Net cash flows (used in)/from financing activities		**(451)**	82
Net (decrease)/increase in cash and cash equivalents	15(c)	**(604)**	713
Cash and cash equivalents at the beginning of the year		**1,821**	1,108
Effect of exchange rate changes on cash and cash equivalents	15(c)	**2**	–
Cash and cash equivalents at the end of the year	15(b)	**1,219**	1,821

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Year ended 31 December 2018

		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 2017		171	2,650	(2,037)	(251)	533	3	536
Profit for the year		–	–	–	447	447	–	447
Exchange differences on retranslation of foreign operations		–	–	8	–	8	–	8
Actuarial gain on employee benefits, net of tax		–	–	–	1	1	–	1
Total comprehensive income for the year		–	–	8	448	456	–	456
Share-based payments, net of taxes		–	–	–	6	6	–	6
At 31 December 2017		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 paid by the Company	10	**–**	**–**	**–**	**(27)**	**(27)**	**–**	**(27)**
At 31 December 2018		**171**	**2,650**	**(2,457)**	**686**	**1,050**	**4**	**1,054**

1 See note 12(c) for an analysis of 'Capital reserves'.

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

Year ended 31 December 2018

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. The Group consists of Bozshakol, Aktogay, the East Region, Bozymchak and Mining Projects including Koksay.

2. Basis of preparation

The condensed consolidated financial statements ('the financial statements') for the year ended 31 December 2018 does not constitute statutory accounts as defined in Sections 435(1) and (2) of the Companies Act 2006. Statutory accounts for the year ended 31 December 2017 have been delivered to the Registrar of Companies and those for 2018 will be delivered following the Company's Annual General Meeting convened for Thursday 2 May 2019. The auditor has reported on these accounts; their reports were unqualified, did not include a reference to any matters to which the auditor drew attention by way of emphasis of matter and did not contain a statement under Sections 498(2) or (3) of the Companies Act 2006.

(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 2018, the Group's net debt was $1,986 million with gross debt of $3,453 million and gross liquid funds of $1,467 million. The gross debt facilities, which are fully drawn, consist of:

- $1,345 million of the CDB-Bozshakol and Bozymchak facilities, which amortise over the period to 2025;
- $1,331 million of the CDB-Aktogay US dollar and Chinese yuan facilities, which amortise over the period to 2029;
- $500 million of the PXF facility which amortises over the period from July 2018 to June 2021; and
- $277 million of the DBK facility, which amortises during the period from June 2018 to June 2025.

Since year end the Group has completed the acquisition of Baimskaya, comprising an initial cash payment of $386 million with a further $50 million payment expected to be made during 2019.

The Board has considered the Group's cash flow forecasts for the period to 30 March 2020 including the outlook for commodity prices, production levels from the Group's operations, its future capital requirements, including the planned expansion of Aktogay and the acquisition and an initial investment in the Baimskaya project, and the principal repayments and interest due under the Group's debt facilities.

The Group's funding strategy is to obtain a new financing facility which the Group's forecasts show is required to finance the construction of the Aktogay expansion. The Board is confident of raising additional liquidity through a combination of new sources of finance and/ or a refinance of debt facilities given the quality of the Group's long-term low cost assets, the low risk nature of the Aktogay expansion and the level of amortisation of existing debt facilities during the period. The Board expects a new facility, in the region of $600 million, to be completed during the first half of 2019 to support the Aktogay expansion.

Assuming additional liquidity is committed as expected, 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. There can however be no guarantee that the new liquidity can be secured as expected. In the unlikely event that no new additional financing can be secured, mitigating actions will be taken to defer planned capital expenditure, to ensure the Group has adequate liquidity throughout the going concern period.

In the severe downside scenarios of sustained lower than expected commodity prices with lower production; and sustained lower prices, lower production and higher operating costs, the Group's forecasts indicate that mitigating actions, including a deferral of construction of the Aktogay expansion, would be required by the end of the first half of 2019 if new financing is not obtained. Whilst these scenarios are considered unlikely, the Board considers taking such mitigating steps to be feasible.

Accordingly, the Board is satisfied that it is appropriate to adopt the going concern basis of accounting in the preparation of these condensed consolidated financial statements.

(b) Basis of accounting

The financial statements have been prepared on a historical cost basis, except for derivative financial instruments which have been measured at fair value. The financial statements are presented in US dollars ('$') and all financial information has been rounded to the nearest million dollars ('$ million'), except where otherwise indicated.

All accounting policies adopted in the preparation of the financial statements are consistent with those followed in the preparation of the Group's annual consolidated financial statements for the year ended 31 December 2018.

None of the amendments to standards and interpretations applicable during the period has had a material impact on the financial position or performance of the Group. The Group has not early adopted any standard, interpretation or amendment that was issued but is not yet effective.

In preparing these financial statements, the Group has adopted all the applicable extant accounting standards issued by the IASB and all the applicable extant interpretations issued by the IFRIC and as adopted by the EU up to 31 December 2018.

The following accounting standards, amendments and interpretations, which had no significant impact on these financial statements, became effective in the current reporting period as adopted by the EU through the European Financial Reporting Advisory Group ('EFRAG'):

Revenue

On 1 January 2018, the Group adopted IFRS 15 '*Revenue from Contracts with Customers*' 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. In applying the transition requirements and provisions of the new standard, the Group reviewed its contracts and assessed the nature of its performance obligations. Certain sales contracts, in particular those relating to copper concentrate, reflect Carriage Insurance Paid delivery terms (Incoterms) which require the Group to deliver the material to a specified location. Whilst the sale and delivery of the material are regarded as two separate performance obligations for which revenue should be recognised, the delivery performance obligation was found to be wholly immaterial compared to the sales performance obligation and therefore no change to prior period revenue recognition was required. The Group also considered the variable consideration constraint on revenue recognition imposed by the new standard in relation to post sale volume adjustments on metal concentrates. Historically, such final volume adjustments on metal concentrates have been minimal and therefore there was no constraint imposed on revenue recognition.

Financial instruments

On 1 January 2018, the Group adopted IFRS 9 '*Financial Instruments*' which replaced IAS 39 '*Financial Instruments: Recognition and Measurement*'. The new standard has been applied retrospectively but did not result in a material change to the Group's accounting policies or a restatement of prior period financial assets and liabilities. As a result of the application of IFRS 9, trade receivables subject to provisional pricing are required to be classified and presented at fair value through profit or loss. Most of the Group's sales contracts are based on provisional pricing which are marked to market at each period end using appropriate quoted market forward prices, with any adjustment included in revenue. Changes in classification and measurement of the Group's financial instruments on transition to IFRS 9 are outlined in note 17. The standard also outlines a new 'expected credit loss' model, used to estimate the credit risk to the Group's financial assets measured at amortised cost. The impact of this model was evaluated and found to be immaterial, given the nature of the Group's financial assets and its credit risk management policies and procedures which control credit exposure and minimise the risk of loss.

Leases

IFRS 16 '*Leases*' becomes effective in the EU on 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 new 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. The Group has reviewed its lease contracts in place at 31 December 2018, which mainly relate to leased office buildings and payments for land, and the right-of-use asset and related liability was found to be immaterial. The net impact on profit before tax in 2019 is also expected to be immaterial. The Group has elected to apply the modified retrospective approach requiring no restatement of comparative figures and there will be no impact on opening equity at 1 January 2019. The new standard does not apply to leases to explore for or use natural resources, such as mining licences and rights.

IFRIC 23 '*Uncertainty over Income Tax Treatments*', *Borrowing costs eligible for capitalisation (Amendments to IAS 23)'* effective from 1 January 2019, '*Definition of a Business (Amendments to IFRS 3)*' effective from 1 January 2020, IFRS 17 '*Insurance Contracts*' effective from 1 January 2021 and a number of other amendments, including those issued following the 2015-2017 annual improvements project, which have not yet been endorsed by the EU are not expected to have a material impact on the Group's condensed consolidated financial statements.

(c) Basis of consolidation

The financial statements set out the Group's financial position as at 31 December 2018 and the Group's financial performance for the year ended 31 December 2018.

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. 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.

(d) Statement of compliance

The financial statements of the Company, and all its subsidiaries and joint operations have been prepared in accordance with IFRSs as issued by the IASB and interpretations issued by the IFRIC of the IASB, as adopted by the EU, and in accordance with the provisions of the Companies Act 2006.

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 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 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 future operational and financial plans, commodity prices, market demand and the competitive environment. For exploration and evaluation assets held by the Group, 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 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 for 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 and its cash generating units ('CGUs'), at 31 December 2018 (and 31 December 2017) did not identify any indicators of impairment or reversal thereof at any of the Group's Kazakhstan CGUs.

At the Bozymchak CGU, adverse court rulings in Kyrgyzstan for the recovery of historical VAT incurred on the construction of the plant, amounting to $16 million and previously included within non-current assets, were received in the second half of 2018. This was considered to be an impairment indicator and an impairment review was undertaken (see note 5).

Key sources of estimation uncertainty

The preparation of discounted future cash flows used for impairment reviews where indicators are identified, includes management estimates of commodity prices, market demand and supply, future operating costs, economic and regulatory environments, capital expenditure requirements, long-term mine plans and other factors. 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 CGU's.

Bozymchak

An impairment charge of $20 million was recognised against the Bozymchak CGU, which is included in the East Region and Bozymchak segment, following the identification of an impairment indicator. In determining the recoverable amount of the CGU, the Directors made estimates of the future risk adjusted cash flows with the key variables being copper and gold price assumptions, operational costs, production profile, copper grades and the discount rate. The recoverable amount of the CGU was estimated at $84 million and determined as its fair value less costs to sell (see note 5).

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 ore reserves and useful lives of property, plant and equipment

Key sources of estimation uncertainty

Ore 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 ore reserves and mineral resources based on information compiled and reviewed by independent competent persons as defined in accordance with the JORC Code.

In assessing the life of a mine for accounting purposes, ore 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 ore reserves and assumptions that are valid at the time of estimation 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 ore reserve estimates within a reasonably possible range in the next 12 months. Revisions to ore reserve estimates in 2018 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 ore reserve estimates, processing levels and commodity prices whilst future costs are discounted using expected discount rates. Due to the relatively long life of the Group's most significant assets, changes in estimates within a reasonable 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.

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 on commodity prices, interest rates, 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. 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 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.

Achievement of commercial production – applicable to 2017 only

Significant accounting judgements

Once an operation reaches the operating level intended by management and regarded to be 'commercial', capitalisation of development costs including borrowing costs ceases, the depreciation of capitalised costs begins and the revenues and operational costs are recorded in the income statement and not capitalised to the balance sheet. Significant judgement is required to determine when the Group's assets achieve commercial production, including evaluation of the following factors: completion of a reasonable period of commissioning; consistent achievement of operational results at a pre-determined level of expected capacity and indicators exist that this level will continue; mineral recoveries are at or approaching expected levels; and transfer of the operation from project personnel to operational personnel.

For the Bozshakol operation, commercial production of the clay plant was determined to have been achieved on 1 July 2017. In making this judgement, the Directors considered the performance of the plant of at least 60% of its design capacity for a three month period, which is broadly consistent with industry practice. Revenues, production costs and interest incurred on borrowings to finance the project were recognised in the income statement and depreciation of its asset base commenced from that date.

The Aktogay sulphide plant achieved commercial production from 1 October 2017 after consistent production of at least 60% of its design capacity over a three month period. Revenues, production costs and interest incurred on borrowings to finance the project were recognised in the income statement with the commencement of depreciation of its assets from that date.

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:

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 concentrator, which sells copper concentrate with gold content as a by-product, was commissioned in February 2016 and achieved commercial production on 27 October 2016, with its revenues and costs being recognised in the income statement from that date. The clay plant, which was commissioned in the fourth quarter of 2016 and which achieved commercial production on 1 July 2017, 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. The clay plant's pre-commercial revenues and costs were recorded against property, plant and equipment until it achieved commercial production, after which depreciation of the asset base commenced and interest associated with borrowings used to finance the construction of the plant was expensed.

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 and achieved commercial production on 1 October 2017, with its revenues and costs being recognised in the income statement from that date. Until commercial production was achieved, the revenues and operating costs of the sulphide concentrator were recorded against property, plant and equipment. The oxide operation, which sells copper cathodes, reached commercial production on 1 July 2016, with its revenues and costs being recognised in the income statement from that date. 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.

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 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 their similar economic characteristics; similar 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 greenfield development of metal deposits and processing facilities. The segment includes the Koksay mineral deposit.

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 54 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.

(a) Operating segments

(i) Income statement information

	Year ended 31 December 2018				
$ million	**Bozshakol**	**Aktogay**	**East Region and Bozymchak**	**Corporate Services**	**Total**
Revenues – income statement	**756**	**775**	**631**	**–**	**2,162**
EBITDA	**520**	**530**	**284**	**(24)**	**1,310**
Special items – note 6	**–**	**–**	**(20)**	**–**	**(20)**
EBITDA (after special items)	**520**	**530**	**264**	**(24)**	**1,290**
Less: depreciation, depletion and amortisation[1]	**(90)**	**(108)**	**(40)**	**(1)**	**(239)**
Less: MET and royalties[1,2]	**(69)**	**(72)**	**(59)**	**–**	**(200)**
Operating profit/(loss)	**361**	**350**	**165**	**(25)**	**851**
Net finance costs and foreign exchange gain					**(209)**
Income tax expense					**(132)**
Profit for the year					**510**

	Year ended 31 December 2017				
$ million	Bozshakol	Aktogay	East Region and Bozymchak	Corporate Services	Total
Revenues					
Gross Revenues	719	530	689	–	1,938
Pre-commercial production revenues capitalised to property, plant and equipment[3]	(21)	(254)	–	–	(275)
Revenues – income statement	698	276	689	–	1,663
Gross EBITDA	515	374	371	(25)	1,235
Pre-commercial production EBITDA capitalised to property, plant and equipment[2,3]	(12)	(185)	–	–	(197)
EBITDA	503	189	371	(25)	1,038
Special items[4] – note 6	–	–	(3)	(16)	(19)
EBITDA (after special items)	503	189	368	(41)	1,019
Less: depreciation, depletion and amortisation[1]	(86)	(42)	(43)	(1)	(172)
Less: MET and royalties[1,2]	(52)	(21)	(59)	–	(132)
Operating profit/(loss)	365	126	266	(42)	715
Net finance costs and foreign exchange loss					(135)
Income tax expense					(133)
Profit for the year					447

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. In 2017 MET incurred at the Bozshakol clay and Aktogay sulphide plants during the pre-commercial production stage of $3 million and $22 million, respectively was capitalised to property, plant and equipment.
3 During pre-commercial production, revenues and operating costs were capitalised to property, plant and equipment.
4 An impairment of $16 million arose from the decision not to continue with the smelter project and reflects costs incurred. This was disclosed in the Corporate Services segment.

(ii) Balance sheet information

At 31 December 2018

$ million	Bozshakol	Aktogay	East Region and Bozymchak	Mining Projects	Corporate Services[4]	Total
Assets						
Non-current assets[1]	**1,104**	**1,178**	**335**	**236**	**5,325**	**8,178**
Current assets excluding cash and cash equivalents and current investments[2]	**258**	**255**	**1,944**	**–**	**1,746**	**4,203**
Cash and cash equivalents and current investments	**7**	**55**	**12**	**25**	**1,370**	**1,469**
Segment assets	**1,369**	**1,488**	**2,291**	**261**	**8,441**	**13,850**
Taxes receivable						**46**
Elimination						**(8,856)**
Total assets						**5,040**
Liabilities						
Non-current liabilities	**6**	**9**	**59**	**3**	**–**	**77**
Inter-segment borrowings	**941**	**676**	**121**	**–**	**–**	**1,738**
Current liabilities[3]	**99**	**94**	**68**	**25**	**1,892**	**2,178**
Segment liabilities	**1,046**	**779**	**248**	**28**	**1,892**	**3,993**
Borrowings						**3,453**
Taxes payable						**87**
Elimination						**(3,547)**
Total liabilities						**3,986**

	At 31 December 2017					
$ million	Bozshakol	Aktogay	East Region and Bozymchak	Mining Projects	Corporate Services[4]	Total
Assets						
Non-current assets[1]	1,342	1,200	363	243	5,307	8,455
Current assets excluding cash and cash equivalents[2]	191	188	198	–	1,877	2,454
Cash and cash equivalents	87	354	176	2	1,202	1,821
Segment assets	1,620	1,742	737	245	8,386	12,730
Taxes receivable						78
Elimination						(7,186)
Total assets						5,622
Liabilities						
Non-current liabilities	9	8	68	3	–	88
Inter-segment borrowings	1,031	694	146	–	–	1,871
Current liabilities[3]	86	354	55	1	88	584
Segment liabilities	1,126	1,056	269	4	88	2,543
Borrowings						3,877
Taxes payable						85
Elimination						(1,881)
Total liabilities						4,624

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. Bozshakol, Aktogay and Mining Projects segments principally operate in Kazakhstan. The East Region and Bozymchak segment includes property, plant and equipment, mining assets and intangible assets of $253 million relating to the East Region assets located in Kazakhstan and $55 million of Bozymchak assets located in Kyrgyzstan (2017: $273 million and $61 million respectively). Additionally included within non-current assets is long-term stockpiled ore of $111 million (2017: $124 million) at Bozshakol and $15 million (2017: $nil million) at Aktogay.
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 $5,309 million of intra-group investments while current assets includes $1,738 million of inter-segment loans, which are eliminated within total assets (2017: $5,305 million and $1,871 million respectively).

(iii) Capital expenditure[1]

	Year ended 31 December 2018					
$ million	**Bozshakol**	**Aktogay[3]**	**East Region and Bozymchak**	**Mining Projects**	**Corporate Services**	**Total**
Property, plant and equipment[2]	**25**	**512**	**29**	**–**	**1**	**567**
Mining assets[2]	**4**	**1**	**40**	**1**	**–**	**46**
Intangible assets	**–**	**1**	**1**	**–**	**–**	**2**
Capital expenditure	**29**	**514**	**70**	**1**	**1**	**615**

	Year ended 31 December 2017					
$ million	Bozshakol[4]	Aktogay[3]	East Region and Bozymchak	Mining Projects	Corporate Services	Total
Property, plant and equipment[2]	71	(29)	35	14	1	92
Mining assets[2]	2	2	39	–	–	43
Intangible assets	1	–	–	–	1	2

Capital expenditure	74	(27)	74	14	2	137

1 The capital expenditure presented by operating segment reflects cash paid and is aligned with the Group's internal capital expenditure reporting.
2 Capital expenditure includes non-current advances paid for items of property, plant and equipment and mining assets.
3 Capital expenditure for Aktogay in 2018 includes $281 million settled in respect of the $300 million NFC deferral. Capital expenditure for Aktogay in 2017 included $106 million of net operating cash inflows capitalised during the period ahead of commercial production.
4 Capital expenditure for Bozshakol in 2017 included $7 million of net operating cash outflows incurred during the period ahead of commercial production. Of the $74 million capital expenditure for Bozshakol in 2017, $35 million related to long-term clay ore stockpiled ahead of commercial production to 30 June 2017.

(b) Information in respect of revenues

Revenues by product to third parties are as follows:

	Year ended 31 December 2018			
$ million	**Bozshakol**	**Aktogay**	**East Region and Bozymchak**	**Total**
Copper cathodes	**67**	**206**	**417**	**690**
Copper in concentrate	**529**	**558**	**–**	**1,087**
Zinc in concentrate	**–**	**–**	**101**	**101**
Gold	**–**	**–**	**68**	**68**
Gold in concentrate	**144**	**–**	**–**	**144**
Silver	**2**	**1**	**37**	**40**
Silver in concentrate	**9**	**6**	**–**	**15**
Other revenues including other by-products	**5**	**4**	**8**	**17**
Revenues – income statement	**756**	**775**	**631**	**2,162**

	Year ended 31 December 2017			
$ million	Bozshakol	Aktogay	East Region and Bozymchak	Total
Copper cathodes	62	212	424	698
Copper in concentrate	510	315	9	834
Zinc in concentrate	–	–	115	115
Gold	–	–	78	78
Gold in concentrate	137	–	1	138
Silver	–	–	50	50
Silver in concentrate	10	3	1	14
Other revenues including other by-products	–	–	11	11
Gross Revenues	719	530	689	1,938
Less: pre-commercial production revenues capitalised to property, plant and equipment	(21)	(254)	–	(275)
Revenues – income statement	698	276	689	1,663

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 silver), 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 2018		At 31 December 2017	
	Provisionally priced volumes	**Weighted average provisional price**	Provisionally priced volumes	Weighted average provisional price
Copper cathodes	**4 kt**	**6,244 $/t**	4 kt	6,865 $/t
Copper in concentrate[1]	**29 kt**	**5,558 $/t**	22 kt	6,067 $/t
Zinc in concentrate[1]	**2 kt**	**2,102 $/t**	4 kt	2,516 $/t
Gold in concentrate[1]	**21 koz**	**1,217 $/oz**	19 koz	1,276 $/oz
Silver in concentrate[1]	**113 koz**	**14 $/oz**	65 koz	16 $/oz

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 2018, 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 decreased revenue by $7 million (2017: $12 million increase in Gross Revenues and revenues). The cumulative commodity pricing adjustments recorded during 2018 between the final price and the forward price at the expected settlement date, at the time of the sale, resulted in a $17 million reduction which is included within revenue.

Revenues by destination from sales to third parties are as follows:

Year ended 31 December 2018

$ million	Bozshakol	Aktogay	East Region and Bozymchak	Total
China	**527**	**600**	**298**	**1,425**
Europe	**229**	**175**	**209**	**613**
Kazakhstan and Central Asia	**–**	**–**	**124**	**124**
Revenues – income statement	**756**	**775**	**631**	**2,162**

	Year ended 31 December 2017			
$ million	Bozshakol	Aktogay	East Region and Bozymchak	Total
China	706	371	391	1,468
Europe	13	159	136	308
Kazakhstan and Central Asia	–	–	162	162
Gross Revenues	719	530	689	1,938
Less: pre-commercial production revenues capitalised to property, plant and equipment	(21)	(254)	–	(275)
Revenues – income statement	698	276	689	1,663

The Group's copper concentrate sales and certain cathode and zinc sales have been contracted to Advaita Trade Private Limited ('Advaita'). Sales from all the Group's segments to Advaita comprise 83% ($1,788 million) of revenues (2017: 71% or $1,377 million of Gross Revenues). The risk arising from the concentration of revenue to one customer is managed through the Group's financial risk management policies requiring sale of metal to be made either on receipt of cash prior to delivery, on delivery or through letters of credit which are received from the customer's bank depending on when the transfer of title of the goods takes place.

5. Impairment losses

$ million	2018	2017
Impairment charges against property, plant and equipment[1]	**16**	19
Impairment charges against mining assets[1]	**4**	–
Impairment charges against non-current VAT receivable[1]	**–**	1
Impairment charges against current VAT receivable	**9**	–
	29	20

1 These impairments are considered to be special items for the purposes of determining the Group's key financial indicators of EBITDA and Underlying Profit (see note 9).

Bozymchak – impairment charges

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, which was determined as its fair value less cost to sell on a discounted cash flow basis at 31 December 2018. 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 per tonne (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.

As a sensitivity, a 5% reduction in the forecast copper prices could result in a further impairment of around $9 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 a further impairment of around $3 million.

East Region – impairment charges

The $9 million impairment against current VAT receivable was recognised on prior period VAT claims which are approaching the statute of limitation of five years and for which recovery is regarded as less than probable. $3 million was subsequently written off against the provision on the balance sheet. In 2017, an impairment of $4 million was recognised against items of property, plant and equipment which were no longer expected to be utilised.

Mining Projects – impairment charges

In 2017, following an assessment of partnering options and a review of the project, the Group determined that it would not progress the smelter project further. $16 million incurred on the feasibility study was impaired and comprised $15 million of impairment charges against property, plant and equipment and $1 million written off against non-current VAT receivable.

6. 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	2018	2017
Special items within operating profit		
Impairment charges against property, plant and equipment	**16**	19
Impairment charges against mining assets	**4**	–
Impairment charges against non-current VAT receivable	**–**	1
Other reimbursements	**–**	(1)
	20	19
Special items within profit before tax		
PXF fees	**–**	10
Total special items	**20**	29

Further information on special items is in the Financial review on page 18.

7. Finance income and finance costs

Finance income

$ million	2018	2017
Interest income	**33**	17
Fair value gains on debt related derivative financial instruments	**–**	13
	33	30

Finance costs

$ million	2018	2017
Interest expense	**236**	158
Total interest expense[1]	**240**	246
Less: amounts capitalised to the cost of qualifying assets[2,3]	**(4)**	(88)
Interest on employee obligations	**1**	2
Unwinding of discount on provisions and other liabilities	**5**	5
Fair value losses on debt related derivative financial instruments	**3**	–
	245	165

1 Total interest expense includes $239 million (2017: $221 million) of interest incurred on borrowings and $1 million (2017: $15 million) relating to the unwinding of the discount on the NFC deferral (see note 14). The prior year comparative period included $10 million in PXF fees that were treated as a special item.

2 In 2018, the Group capitalised to the cost of the Aktogay expansion project $4 million of general borrowings costs from the PXF facility, at an average rate of interest of 4.97%. In 2017, the Group capitalised to the cost of qualifying assets $10 million of borrowing costs incurred on the outstanding debt during the year on the CDB-Bozshakol and Bozymchak facilities at an average rate of interest (net of interest income) of 5.87%, $56 million on the CDB-Aktogay US$ and CNY facilities at an average rate of interest of 5.60% and 4.54% respectively and $11 million on the $300 million DBK loan at an average rate of interest of 5.89%. Interest capitalised during 2017 also included $11 million of unwinding of interest on the NFC deferral (see note 14).

3 In 2018, the interest cost on borrowings capitalised to qualifying assets of $4 million is deductible for tax purposes against income in the current year. This capitalised interest, which relates to the expansion project at Aktogay arose from interest incurred on the Group's PXF facility, which is regarded as a general borrowing for Group reporting purposes.

Further information relating to finance income and costs is in the Financial review on page 19.

8. Income tax expense

Major components of income tax expense are:

$ million	2018	2017
Current income tax		
Corporate income tax – current period (UK)	**–**	–
Corporate income tax – current period (overseas)	**83**	103
Corporate income tax – prior periods (UK)	**–**	4
Corporate income tax – prior periods (overseas)	**1**	1
	84	108
Deferred income tax		
Corporate income tax – current period temporary differences	**49**	24
Corporate income tax – prior periods temporary differences	**(1)**	1
	48	25

	132	133

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	2018	2017
Profit before tax	**642**	580
At UK statutory income tax rate of 19.0% (2017: 19.25%)[1]	**122**	112
Underprovided in prior periods – current income tax	**1**	5
(Over)/under provided in prior periods – deferred income tax	**(1)**	1
Unrecognised tax losses	**–**	4
Effect of domestic tax rates applicable to individual Group entities	**5**	–
Tax effect of non-deductible items:		
Transfer pricing	**1**	2
Other non-deductible expenses	**4**	9
	132	133

1 In 2017, the UK statutory rate for January to March 2017 was 20.0% and for April to December 2017 was 19.0%, giving a weighted average full year rate of 19.25%.

Corporate income tax ('CIT') is calculated at 19.0% (2017: 19.25%) of the assessable profit for the year for the Company and its UK subsidiaries and 20.0% for the operating subsidiaries in Kazakhstan (2017: 20.0%). 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.

Effective tax rate

The effective tax rate was 21% (2017: 23%). 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, which may include impairment losses, increases the Group's overall effective tax rate.

The following factors impacted the effective tax rate for the year ended 31 December 2018:

Unrecognised tax losses and untaxed income

Bozymchak

No income tax expense is recognised at Bozymchak as CIT is charged at 0%, which has the effect of reducing the Group's overall effective tax rate. With the introduction of this legislation in 2017, Bozymchak will not be able to utilise historical losses.

Other non-deductible expenses

The 2018 non-deductible items mainly comprise 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 19.

9. Earnings per share

The following reflects the income and share data used in the EPS computations.

$ million (unless otherwise stated)	2018	2017
Net profit attributable to equity shareholders of the Company	**510**	447
Special items net of tax – note 6	**20**	29
Underlying Profit	**530**	476
Weighted average number of ordinary shares of 20 pence each for EPS on Ordinary and Underlying Profit calculation	**447,331,406**	446,658,862
Ordinary EPS – basic and diluted ($)	**1.14**	1.00
EPS based on Underlying Profit – basic and diluted ($)[1]	**1.18**	1.07

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 54.

Ordinary EPS

Basic and diluted EPS is calculated by dividing profit for the year 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 both held in treasury and treated as own shares.

10. Dividends

(a) Dividends paid

The dividends paid during the year ended 31 December 2018 are as follows:

	Per share US cents	Amount $ million
Year ended 31 December 2018		
Interim dividend in respect of year ended 31 December 2018	6.0	27

There were no dividends paid in the year ended 31 December 2017.

(b) Dividends declared after the balance sheet date

	Per share US cents	**Amount $ million**
Recommended by the Directors on 20 February 2019 (not recognised as a liability at 31 December 2018)		
Final dividend in respect of year ended 31 December 2018	**6.0**	**28**

The amount of the recommended final dividend of 6.0 US cents per share has been estimated based on the ordinary shares in issue (excluding treasury shares) at 31 December 2018 and on the new shares issued in January 2019 as part settlement of the acquisition of the Baimskaya copper project. For further details see note 19.

11. Other non-current assets

$ million	**2018**	2017
Advances paid for property, plant and equipment	**147**	8
Non-current VAT receivable[1]	**11**	38
Non-current inventories[2]	**127**	124
Long-term bank deposits[3]	**3**	2
Other long-term advances[4]	**15**	–
Gross value of other non-current assets	**303**	172
Provision for impairment	**(2)**	(2)
	301	170

1 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.
2 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.
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 are amounts transferred to the Baimskaya project for study costs, ahead of Initial Completion of the acquisition. Following Initial Completion, announced in January 2019, these amounts will be reclassified to mining assets.

12. 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 2017, 31 December 2017 and 2018	**458,379,033**	**92**	**171**

The issued share capital was fully paid. During the year, 1,396,856 (2017: 143,310) 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 2018, the Company holds 10,146,890 (2017: 11,543,746) ordinary shares in treasury and the issued share capital of the Company which carries voting rights of one vote per share, comprises 448,232,143 (2017: 446,835,287) 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 cost of shares purchased by the Trust is charged against retained earnings as treasury shares. The Employee Benefit Trust has waived the right to receive dividends on these shares. During 2018, the Company made no purchases through the Trust in anticipation of satisfying future awards (2017: no purchases). 14,565 shares (2017: 223,429) were transferred out of the Trust in settlement of share awards granted to employees that were exercised during the period. Following approval from shareholders, shares held in treasury will be used to settle future awards.

At 31 December 2018, the Group, through the Employee Benefit Trust, owned 5,162 shares in the Company (2017: 19,727) with a market value of $35 thousand and a cost of $79 thousand (2017: $0.2 million and $0.1 million respectively). The shares held by the Trust represented less than 0.01% (2017: 0.01%) of the issued share capital at 31 December 2018.

(c) Capital reserves

$ million	Currency translation reserve	Capital redemption reserve	Total
At 1 January 2017	(2,068)	31	(2,037)
Exchange differences on retranslation of foreign operations	8	–	8
At 31 December 2017	(2,060)	31	(2,029)
Exchange differences on retranslation of foreign operations	**(428)**	**–**	**(428)**
At 31 December 2018	**(2,488)**	**31**	**(2,457)**

(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 decrease in the US dollar value of the Group's foreign currency operations of $428 million (2017: increase of $8 million) follows a 16% decrease in the value of the tenge from 31 December 2017 to 31 December 2018.

(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.

13. Borrowings

	Maturity	Average interest rate during the year	Currency of denomination	Current $ million	Non-current $ million	Total $ million
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% - 4.50%	2021	4.97%	US dollar	**200**	**300**	**500**
Development Bank of Kazakhstan – US$ LIBOR + 4.50%	2025	6.70%	US dollar	**42**	**235**	**277**
				539	**2,914**	**3,453**
31 December 2017						
CDB-Bozshakol and Bozymchak – US$ LIBOR + 4.50%	2025	5.87%	US dollar	179	1,345	1,524
CDB-Aktogay facility – PBoC 5 year	2028	4.54%	CNY	12	116	128
CDB-Aktogay facility – US$ LIBOR + 4.20%	2029	5.60%	US dollar	105	1,222	1,327
Pre-export finance facility – US$ LIBOR + 3.00% - 4.50%	2021	5.04%	US dollar	100	500	600
Development Bank of Kazakhstan – US$ LIBOR + 4.50%	2025	5.89%	US dollar	22	276	298
				418	3,459	3,877

CDB-Bozshakol and Bozymchak facilities

At 31 December 2018, $1.3 billion (2017: $1.5 billion) was drawn under the facility agreements. The facilities accrue interest at US$ LIBOR plus 4.50% and arrangement fees with an amortised cost at 31 December 2018 of $12 million (2017: $15 million) have been netted off against these borrowings in accordance with IFRS 9. During 2018, $183 million of the borrowing was repaid, with $180 million due to be paid 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.

CDB-Aktogay finance facilities

The CDB-Aktogay facilities consists of a CNY 1.0 billion facility and a $1.3 billion US dollar facility. The funds mature 15 years from the date of the first draw down. KAZ Minerals PLC acts as guarantor of the loans.

The CNY 1.0 billion facility was fully drawn at 31 December 2015. At 31 December 2018, the drawn US dollar equivalent amount was $110 million (2017: $128 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 with $12 million repaid in 2018, while $12 million is due to be paid within 12 months of the balance sheet date. To protect the Group from currency risks arising on the CNY denominated debt, the Group has entered into CNY/US$ 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 2018, included within payables, is $12 million (2017: $9 million).

The US dollar facility accrues interest at US$ LIBOR plus 4.20%. At 31 December 2018, the $1.3 billion facility was fully drawn. Arrangement fees with an amortised cost of $11 million (2017: $13 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 commencing from 2018. During 2018, $108 million was repaid, with $105 million due to be paid within 12 months of the balance sheet date (including $2 million of unamortised debt costs).

Pre-export finance facility (‘PXF’)

In June 2017, the Group completed an amendment and extension of the PXF. The new facility extended the maturity profile of the facility by two and a half years from December 2018 until June 2021. Under the revised repayment profile, principal repayments commenced in July 2018 and continue in equal monthly instalments over a three-year period until final maturity in June 2021.

The facility amount is $600 million and was fully drawn at 31 December 2017. The interest basis of the facility is substantially the same as the previous facility with a variable margin of between 3.0% and 4.5% above US$ LIBOR, dependent on the ratio of net debt to EBITDA which will be tested semi-annually. During 2018, $100 million of the borrowing was repaid, with $200 million due to be paid within 12 months of the balance sheet date. KAZ Minerals PLC, Vostoktsvetmet LLC and KAZ Minerals Sales Limited act as guarantors of the facility.

Development Bank of Kazakhstan facility (‘DBK’)

In December 2016, the Group entered into a $300 million credit facility with the DBK which was fully drawn at 31 December 2016. The facility extends for a term of eight and a half years and bears an interest rate of US$ LIBOR plus 4.5%. The facility is repayable in instalments with the first repayment made in June 2018, followed by semi-annual repayments in May and November of each year from 2019 until 2024 and a final repayment in June 2025. The facility was drawn by KAZ Minerals Aktogay LLC, a Kazakhstan wholly owned subsidiary. KAZ Minerals PLC acts as guarantor of the facility.

At 31 December 2018, $277 million was drawn under the facility. Arrangement fees with an amortised cost of $1 million (2017: $2 million) have been netted off against these borrowings in accordance with IFRS 9. During 2018, $21 million of the borrowing was repaid, with $42 million due to be paid within 12 months of the balance sheet date.

Undrawn project and general and corporate purpose facilities

All debt facilities were fully drawn at 31 December 2018 and 2017.

14. Other liabilities

$ million	Payables to NFC	Advance consideration	Payments for licences	Total
At 1 January 2017	284	–	10	294
Payments	–	–	(1)	(1)
Unwinding of discount	15	–	1	16
Net exchange adjustment	–	–	(2)	(2)
At 31 December 2017	299	–	8	307
Additions	**–**	**25**	**–**	**25**
Payments	**(281)**	**–**	**(2)**	**(283)**
Unwinding of discount	**1**	**–**	**1**	**2**
Net exchange adjustment	**–**	**–**	**2**	**2**
At 31 December 2018	**19**	**25**	**9**	**53**
Current	**19**	**25**	**2**	**46**
Non-current	**–**	**–**	**7**	**7**
At 31 December 2018	**19**	**25**	**9**	**53**
Current	299	–	1	300
Non-current	–	–	7	7
At 31 December 2017	299	–	8	307

(a) 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 with $19 million to be settled in early 2019.

The extended credit terms were discounted using a rate of US$ LIBOR plus 4.20% on the estimated cost of services performed. The unwinding of the interest was charged to the income statement within finance costs (2017: $11 million charged to property, plant and equipment as a borrowing cost until the date that the project reached commercial production).

(b) Advance consideration

In December 2018, the Group received $25 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 immediate parent entity of the Koksay exploration licence holder, as announced in June 2018.

The transaction is expected to complete in the first half of 2019, with the consideration to be solely used for investment in the Koksay project. On completion of the transaction, NFC's share in Koksay will be reflected as a non-controlling interest.

(c) 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 whilst 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 (2017: 7.6%) and 4.0% for US dollar (2017: 4.0%) obligations. Under the subsoil use agreements, the historical cost payments amortise over a 10 year period and commence with first production.

15. Consolidated cash flow analysis

(a) Reconciliation of profit before tax to net cash inflow from operating activities

$ million	Notes	2018	2017
Profit before tax		**642**	580
Finance income	7	**(33)**	(30)
Finance costs	7	**245**	165
Share-based payments		**3**	3
Depreciation, amortisation and depletion		**251**	187
Impairment losses	5	**29**	20
Unrealised foreign exchange (gain)/loss		**(8)**	2
Other reimbursements		**–**	(1)
Operating cash flows before changes in working capital and provisions		**1,129**	926
Decrease in non-current VAT receivable		**3**	232
Increase in inventories		**(158)**	(65)
Increase in prepayments and other current assets		**(30)**	(41)
Decrease in trade and other receivables		**4**	27
Decrease in employee benefits		**(1)**	(1)
Decrease in provision for closure and site restoration		**(1)**	–
Increase in trade and other payables		**51**	6
Cash flows from operations before interest and income taxes paid		**997**	1,084

Non-cash transactions

There were the following non-cash transactions:

- capitalised interest of $4 million (2017: $88 million) for property, plant and equipment; and
- the reassessment of the provision for closure and site restoration during the year has resulted in a decrease of $3 million (2017: increase of $6 million) to property, plant and equipment, with a corresponding decrease (2017: increase) in the site restoration and clean up provisions.

(b) Cash and cash equivalents

$ million	2018	2017
Cash deposits with short-term initial maturities[1]	**1,157**	1,543
Cash at bank[2]	**62**	278
	1,219	1,821

1 Excludes term deposits with original maturity of greater than three months classified within current investments.

2 Cash at bank at 31 December 2018 of $2 million (2017: $nil) was restricted by legal or contractual arrangements. These amounts are excluded from the Group's measure of net debt (see note 15(c)). Included within Cash and cash equivalents is $25 million advance consideration received from NFC in respect of the agreement for NFC to invest $70 million for a 19.4% equity stake in Koksay, as announced in June 2018. This amount is to be solely used for the investment into the Koksay project (see note 14).

(c) Movement in net debt

$ million	At 1 January 2018	Cash flow	Other movements[1]	At 31 December 2018
Cash and cash equivalents	1,821	**(604)**	**2**	**1,219**
Less: restricted cash	–	**–**	**(2)**	**(2)**
Current investments	–	**250**	**–**	**250**
Borrowings[2]	(3,877)	**424**	**–**	**(3,453)**

Net debt[3]	(2,056)	**70**	**–**	**(1,986)**

$ million	At 1 January 2017	Cash flow	Other movements[1]	At 31 December 2017
Cash and cash equivalents	1,108	713	–	1,821
Borrowings[2]	(3,777)	(82)	(18)	(3,877)
Net debt[3]	(2,669)	631	(18)	(2,056)

1 Other movements in 2018 within restricted cash reflect legal or contractual arrangements against cash and cash equivalents which are excluded from the Group's measure of net debt. Other movements on borrowings comprise net foreign exchange movements and non-cash amortisation of fees on borrowings. For the year ended 31 December 2018, the $nil other movement on borrowings consists of $6 million of amortisation of fees on the Group's financing facilities and $6 million foreign exchange gains on the CDB-Aktogay RMB facility. For the year ended 31 December 2017, the $18 million other movement on borrowings consisted of $9 million of amortisation of fees on the Group's financing facilities and $9 million of foreign exchange differences on the CDB-Aktogay RMB facility.
2 The cash flows on borrowings reflect repayments on existing facilities of $424 million (2017: $294 million) with no draw downs in 2018 (2017: $376 million).
3 Net debt is an APM. 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 54.

16. 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				
2018	**4**	**101**	**3**	**2**
2017	5	100	2	3

1 No provision is held against the amounts owed by related parties at 31 December 2018 and 2017.

Kazakhmys Holding Group

The related party transactions and balances are 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. These include the provision of smelting and refining of the Group's copper concentrate, electricity supply and certain maintenance functions.

(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.

17. Financial instruments

The carrying amounts of financial assets and liabilities by categories are as follows:

$ million	Notes	**2018**	2017
Financial assets at amortised cost[1]			
Long-term bank deposits	11	**3**	2
Other long-term advances	11	**15**	–
Trade and other receivables not subject to provisional pricing		**13**	5
Current investments	15(c)	**250**	–
Cash and cash equivalents	15(b)	**1,219**	1,821
		1,500	1,828
Financial assets at fair value through profit and loss[1]			
Trade receivables subject to provisional pricing[2]		**114**	127
Financial liabilities at amortised cost[1]			
Borrowings[3]	13	**(3,453)**	(3,877)
Other liabilities	14	**(53)**	(307)
Trade and other payables[4]		**(211)**	(190)
		(3,717)	(4,374)
Financial liabilities at fair value through profit and loss[1]			
Derivative instrument[5]		**(12)**	(9)

1 Financial assets at amortised cost were previously classified as 'loans and receivables' under IAS 39. There was no difference between the carrying amount under IAS 39 and the carrying amount under IFRS 9, at 1 January 2018. Trade receivables subject to provisional pricing were previously classified as 'loans and receivables' under IAS 39 whereas they are classified as Financial assets at fair value through profit and loss under IFRS 9. The transition to IFRS did not have any impact on the recognition or measurement of financial assets. There was no change in the classification and measurement of financial liabilities at fair value through profit and loss and financial liabilities at amortised cost from IFRS 9 on 1 January 2018.
2 Trade receivables subject to provisional pricing include $7 million adverse adjustment (2017: $12 million favourable) 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.
3 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.
4 Excludes payments received in advance from customers, other taxes payable and MET and royalties payable that are not regarded as financial instruments.
5 Derivative financial instruments, representing a cross currency swap 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.

18. Capital expenditure commitments

The Group has capital expenditure commitments for the purchase of property, plant and equipment. The total commitments for property, plant and equipment at 31 December 2018 amounted to $724 million (2017: $47 million). These amounts relate mainly to the Aktogay expansion project and reflect contractual commitments, not the minimum cost which would be incurred in the event of delay or cancellation.

19. Post balance sheet events

(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 $436 million in cash and 22.3 million new KAZ Minerals shares, which were allotted to the vendor. $50 million of the $436 million cash consideration has been withheld pending the release of a guarantee agreement made by the acquired entity which is the legal owner of the Baimskaya licence. The final cash payment of $50 million is expected to be settled in 2019. 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.

In assessing the accounting for the acquisition, 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 will be accounted for as an asset acquisition, not a business combination, with the majority of the value paid being shown as a mining licence within mining assets.

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 $675 million includes 22.3 million KAZ Minerals PLC shares valued at $239 million, which will be recognised as an increase in share capital of around $6 million and share premium of $233 million. The Deferred Consideration of $225 million will also be included within equity, 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 a non-controlling interest will not be recognised as the remaining 25% will be purchased through Deferred Consideration.

(b) Dividends

On 20 February the Directors of the Company recommended a final dividend for 2018 of 6.0 USc per share. See note 10.

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.

(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 19. 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 24 of KAZ Minerals' 2017 Annual Report and Accounts. A reconciliation to operating profit is provided in note 4(a)(i) of the condensed 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 20 as set out in note 9 to the condensed 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 9 of the condensed consolidated financial statements). This is one of the Group's KPIs for measuring financial performance, the relevance of which is outlined on page 24 of KAZ Minerals' 2017 Annual Report and Accounts. A calculation of EPS based on Underlying Profit is included within note 9 of the condensed 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	**2018**	2017
Cash and cash equivalents	**1,219**	1,821
Current investments	**250**	–
Less: restricted cash	**(2)**	–
Gross liquid funds	**1,467**	1,821

(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. A reconciliation of net debt is included on page 23.

(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 32, before capital expenditure and non-current VAT associated with expansionary and new 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 24 of KAZ Minerals' 2017 Annual Report and Accounts. A reconciliation from net cash flow from operating activities is provided below.

$ million	**2018**	2017
Net cash flows from operating activities	**673**	752
Less: net proceeds on non-current VAT	**(3)**	(232)
Less: sustaining capital expenditure	**(85)**	(68)
Free Cash Flow	**585**	452

(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)	2018	2017
Revenues	2,162	1,663
Less: EBITDA – see note 4(a)(i)	(1,310)	(1,038)
Cash operating costs	852	625
Less: cash operating costs at corporate segment	(24)	(25)
Less: tolling revenues included within other revenues	(4)	–
Add: TC/RC on concentrate sales	115	98
Add: pre-commercial production costs capitalised to property, plant and equipment	–	78
Gross cash costs	939	776
Own copper cathode equivalent sales (kt)	296.1	255.7
Gross cash costs ($/t)	3,171	3,035
Gross cash costs (USc/lb)	**144**	138

(h) Net cash costs

Net cash costs is defined as gross cash costs less by-product Gross 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 25 of KAZ Minerals' 2017 Annual Report and Accounts. A reconciliation from gross cash costs is shown below.

$ million (unless otherwise stated)	2018	2017
Gross cash costs – see note (g) above	939	776
Less: by-product Gross Revenues – see note 4(b), excluding tolling revenues	(381)	(406)
Net cash costs	558	370
Own copper cathode equivalent sales (kt)	296.1	255.7
Net cash costs ($/t)	1,884	1,447
Net cash costs (USc/lb)	**85**	66

(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 25 of KAZ Minerals' 2017 Annual Report and Accounts. A reconciliation from capital expenditure included within the consolidated statement of cash flows is shown below.

$ million (unless otherwise stated)	2018	2017
Purchase of intangible assets – cash flow statement	2	2
Purchase of property, plant and equipment – cash flow statement	567	92
Investments in mining assets, including licences – cash flow statement	46	43
Less: expansionary capital expenditure – see Financial review	(530)	(69)
Sustaining capital expenditure	85	68
Copper production (kt)	294.7	258.5
Maintenance spend per tonne of copper produced ($/t)	**288**	263

(j) Gross Revenues – applicable to 2017 only

Gross Revenues are sales proceeds from all volumes sold, including pre-commercial production volumes. This measure includes the results of the pre-commercial Bozshakol and Aktogay operations before capitalisation and provides a measure of their performance for the full year. A reconciliation to revenues is in note 4(a)(i) of the condensed consolidated financial statements.

(k) Gross EBITDA – applicable to 2017 only

Gross EBITDA is defined as earnings, including pre-commercial earnings, before interest, taxation, depreciation, depletion, amortisation, MET and royalties and special items[1]. This measure includes the results of the pre-commercial Bozshakol and Aktogay operations before capitalisation and provides a measure of their performance for the full year. A reconciliation to operating profit is in note 4(a)(i) of the condensed consolidated financial statements.

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. Special items are identified in note 6 in the condensed consolidated financial statements.

GLOSSARY

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 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

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, comprised of 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 April 2016

Commercial Production (Baimskaya)
the first commissioned concentrator at the Project achieving 70 per cent of nameplate processing capacity for six consecutive calendar months

Committee or Committees
any or all of the Audit; Health, Safety and Environment; Remuneration; Nomination; Operations Ramp Up Assurance; and Projects Assurance Committees depending on the context in which the reference is used

Company or KAZ Minerals
KAZ Minerals PLC

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

Cuprum Holding
Cuprum Netherlands Holding B.V. (now named Kazakhmys Holding Group B.V.), the entity to which the Disposal Assets were transferred

DBK
Development Bank of Kazakhstan

Directors
the Directors of the Company

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 million 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

Disposal Assets
the Disposal Assets comprised the mining, processing, auxiliary, transportation and heat and power assets of the Group in the Zhezkazgan and Central Regions of Kazakhstan. The Disposal Assets included 12 copper mines, mine development opportunities, four concentrators, two smelters, two coal mines and three captive heat and power stations, all of which were disposed of as a result of the Restructuring

dollar or $ or US$
United States dollars, the currency of the United States of America

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 condensed 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 9 of the condensed 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 non-current VAT associated with expansionary and new projects less sustaining capital expenditure (see page 55 for a reconciliation to the closest IFRS based measure)

g/t
grammes per metric tonne

gross cash cost
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. A reconciliation to operating profit is in note 4(a)(i) of the condensed consolidated financial statements

gross liquid funds
the aggregate of cash and cash equivalents and current investments less restricted cash

Gross Revenues
sales proceeds from all volumes sold, including pre-commercial production volumes. A reconciliation to revenues is in note 4(a)(i) of the condensed consolidated financial statements

the Group
KAZ Minerals PLC and its subsidiary companies

HSE
Health, Safety and Environment

IAS
International Accounting Standard

IASB
International Accounting Standards Board

ICG
Industrial Construction Group LLC

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 million 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
The entity to which the Disposal Assets were transferred (formerly Cuprum Netherlands Holding B.V.)

Kazakhstan
the Republic of Kazakhstan

koz
thousand ounces

KPI
key performance indicator

kt
thousand metric tonnes

Kyrgyzstan
the Kyrgyz Republic

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
Bozshakol and Aktogay

MET
mineral extraction tax

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 15(c) of the condensed consolidated financial statements

New Code
the UK Corporate Governance Code and accompanying Guidance on Board Effectiveness published in July 2018

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

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

Restructuring
the transfer, subject to certain consents and approvals, of the Disposal Assets to Cuprum Netherlands Holding B.V. (now named Kazakhmys Holding Group B.V.) which was approved by shareholders at the General Meeting on 15 August 2014 and completed on 31 October 2014

RMB
renminbi, the official currency of the People's Republic of China

$/t or $/tonne
US dollars per metric tonne

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 6 to the condensed 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/RCs
treatment charges and refining charges for smelting and refining services

tenge or KZT
the official currency of the Republic of Kazakhstan

TJ
a standard unit of energy, work and heat equal to 10^{12} joules

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 9 to the condensed 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