

**Ferro-Alloy Resources Limited**

Annual Report  
for the year ended  
31 December 2020

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## Report on operations

### *Introduction*

Despite the challenges resulting from the Covid-19 pandemic and consequent economic turmoil, the Company has made significant progress towards the expansion of the existing operation and, most importantly, continued the work to put Balasausqandiq into production including the feasibility study and infrastructure development.

In March 2021 the Company entered into an Investment Agreement with Vision Blue Resources under which Vision Blue has invested \$3.1m in equity and has an option to invest a further \$9.5m at the agreement price of £0.09 per share plus up to a further \$30m at higher prices to finance construction of Phase 1 of the Balasausqandiq vanadium project.

### *Production*

During the year ended 31 December 2020, production of vanadium pentoxide (V<sub>2</sub>O<sub>5</sub>) amounted to 237 tonnes, some 56% above 2019. Whilst this is a very solid increase, without the disruptions experienced due to the Covid-19 pandemic and previously reported interruptions to power supply, production would have been significantly higher.

Quarter (2020)	Production of Vanadium Pentoxide (tonnes of vanadium pentoxide contained in AMV*)	Growth vs last year	Production of Molybdc Oxide (tonnes of molybdc oxide contained in calcium molybdate)
Q1	49.1	+53%	-
Q2	48.9	+25%	-
Q3	89.8	+135%	-
Q4	49.5	+15%	12.0
<b>2020 total</b>	<b>237.3</b>	<b>56%</b>	<b>12.0</b>

\* AMV: ammonium metavanadate

The focus of the Existing Operation during 2020 was the commissioning and expansion of the new pyrometallurgical process line which is designed to treat a different type of concentrate from that which was previously treated.

In February, the second roasting oven was installed and the pyrometallurgical line completed. Over the course of the first half of the year this new process became the most important contributor to the production, bringing the total capacity of the combined plant to some 80 tonnes per month depending on the grades of concentrates treated, six times more than 2019 production. Actual production has lagged significantly behind this level as a result of both Covid-19 restrictions, which have affected both the Company and its suppliers, power supply issues which are being resolved by the commissioning of the new power line, and a mix of raw-materials including some lower grades.

It is expected that the connection to the adjacent high-voltage power-line will take place during July 2021, further details of which are set out below.

The impact of Covid-19 has been seen particularly in the more technically difficult hydrometallurgical production process which has been temporarily halted several times, primarily as a result of the inability to bring specialist staff to site. This has resulted in some five months of lost production from this part of the operation. The Company has prioritised the pyrometallurgical operations, not only because it is technically simpler, but also because the prices paid for the raw materials flex with the vanadium price so margins are less affected by low prices than for the hydrometallurgical line where the price is fixed.

The Covid-19 travel bans also made installation, commissioning and fault rectification much more difficult. The Company has, using substantially its own workforce, completed commissioning work on two of the three new press filters which would normally have required site visits from the suppliers, and completed the installation of the oven to convert ammonium metavanadate to vanadium pentoxide.

Production in the fourth quarter was disappointing, with little contribution from the hydrometallurgical line and restricted deliveries from the Company's main high-grade concentrate supplier, attributed to the effects of the Covid-19 restrictions on their operation.

#### *Production outlook*

Although the progression to higher production slowed towards the end of 2020, the equipment is now in place to achieve significantly higher production, assisted by the near-term connection to the high-voltage power-line and as the global vaccination programme starts to lessen the restrictions caused by the Covid-19 pandemic.

Supplies of raw materials continued to be restricted below contracted levels throughout the first half of 2021, attributed by suppliers to Covid-19 related restrictions and container shortages. The delayed supplies have now started to arrive and enough material is on site and in transit for over four months of production at the planned level. Contracts are in place for regular monthly deliveries which should enable the Company to maintain sufficient stocks of raw materials to avoid shortages in future.

Looking further ahead, the Company is planning to procure an electric arc furnace which can double production capacity again. This furnace has been designed, contracts agreed and will take some six months to build. The furnace will be used to produce ferro-vanadium directly from raw-material concentrates without first producing vanadium pentoxide, and it will also be used for the production of by-product ferro-nickel, utilising the nickel content of our raw-materials which is currently sold at very low prices as a low-grade concentrate.

### **Other developments**

#### *Conversion of AMV to vanadium pentoxide*

The equipment to convert AMV to vanadium pentoxide has been commissioned and trial production of vanadium pentoxide powder has commenced. This product is suitable for chemical uses and often attracts higher prices than standard vanadium pentoxide depending on the purity.

#### *Calcium molybdate production*

Commercial production of calcium molybdate started in October 2020, with 20 tonnes of calcium molybdate (CaMoO<sub>4</sub>), containing 12 tonnes of molybdic oxide (MoO<sub>3</sub>) produced by the end of the year. Calcium molybdate production, although small scale, is highly profitable because it provides additional recovery as a by-product from the same raw-materials and with relatively low processing costs. The Company now has the option to source molybdenum-bearing raw-materials with molybdenum as the primary content where it is more profitable to do so.

### *Electrolyte for batteries*

In September we reported that the Company's specialists had developed a new process for the production of electrolyte for vanadium flow batteries directly from ammonium metavanadate, a more economical process.

### *Connection to high-voltage powerline*

As previously reported, the Company's operations have up to now been severely impacted by the unreliability of the existing power supply with power delivered over a long distance on a low voltage line with wooden poles. It is subject to frequent unplanned outages, voltage and phase instability, and is expensive. The instability damages our equipment and causes long interruptions as restart procedures can take far longer than the power interruption.

The Company has been constructing a link to draw power from an adjacent high voltage (110kV) line, including the connection, transformers, some three km of line and necessary communications and switching. This US\$2.5m project has now been completed on budget and substantially on time, but delays by the supplier of power-measurement equipment required by the owners of the line mean that first power is expected to be drawn only in late July 2021.

The new power supply will also be used for Phase 1 of the large Balasausqandiq vanadium project, although some augmentation of transformer capacity will be required.

### *Balasausqandiq project - feasibility study*

Development of the large Balasausqandiq vanadium deposit is on-going in parallel with the Company's Existing Operations.

The main components of the feasibility study into Phase 1 of the project had already been completed as part of the locally required Kazakhstan study but parts require upgrade or further review to meet the requirements of a western bankable feasibility study. The remaining parts of the study have been significantly delayed by Covid-19 restrictions, including a prohibition on overseas specialists visiting site and an inability to export samples but the process plant design work has continued remotely by Coffey International, a Tetra Tech group company, whose work was initiated, including a site visit, before the lock-downs.

The innovative process developed and refined in our commercial demonstration plant in Kazakhstan has been adapted to produce a high purity V<sub>2</sub>O<sub>5</sub> product from the black shale mined at Balasausqandiq. Flow sheet development, the associated mass and energy balance, and the process design criteria, are complete. In parallel Coffey International have specified confirmatory metallurgical test work that will be completed at an accredited international laboratory. The sample material has been collected and is ready to ship.

Coffey International's engineering team has specified the major mechanical equipment, designed the process areas and completed a 3D CAD model of the general arrangement of the plant. The model includes the buildings that will house the process equipment. Budget price enquiry, in support of the capital cost estimate, is underway and is approximately 50% complete.

Following the investment by Vision Blue, and consequently the greater funds expected to be available to the Company in due course, it has been decided to expand the scope of the study to include not just Phase 1 of the Group's development plans (1 million tonnes of ore treated per year) but also, so far as appropriate, Phase 2 (increase to 4 million tonnes of ore per year) and the by-product revenues. This will involve some additional drilling to upgrade ore-bodies 2, 3 and 4 to the Indicated level (under JORC 2012) and, with the addition of mine planning, to the probable reserve standard. The Directors believe that although this will delay the publication of the feasibility study until mid-2022, it will facilitate a focussed development of the resource, more properly reflect the Company's value and potential which will result in the most optimal financing arrangements for the project.

### *Covid-19*

The Covid-19 pandemic had a negative impact on the Company's operations in 2020. While cases started to decline towards the end of Q3 2020, Kazakhstan experienced a second wave during Q4 2020, albeit at lower levels than in Europe. Kazakhstan has maintained restrictions on visitors from overseas and implemented lock-downs on a selective basis. A third wave started in March 2021 but actions taken by the Government have prevented a major outbreak and currently, there are around one thousand cases per day.

Kazakhstan started vaccinations on 1 February 2021 using the Russian Sputnik-V vaccine and Kazakhstan QazVac vaccine. During 2021 the plan is to vaccinate some 6 million people in Kazakhstan starting with front line medical professionals followed by education providers and then higher risk individuals. The current level of vaccination is now approaching 10% of the population.

#### *Environment & changing climate*

On the 2-13 December 2019 the UN Climate Change Conference was held in Madrid. During the annual conference, countries' approaches to the implementation of actions in the field of climate change, based on the provisions of the United Nations Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement, were agreed. Kazakhstan participated in the conference and reconfirmed that its is commitment to reduce greenhouse gas emissions by 15% by 2030 (compared with the levels of 1990). In addition, Kazakhstan is planning to develop a concept of low carbon development by 2050 which is expected to be finalised and published in June 2021.

During 2020, the Company's operations emitted 24.21 tonnes of carbon oxides, compared with the permitted level of 50.33 tonnes during the year. The Company will be reviewing the Government report on low carbon development after its publication and will develop its strategy related to Climate Change accordingly while ensuring that it is in line with leading international practice.

#### *Product prices*

At the start of 2020 the price of vanadium pentoxide in Europe was a little over US\$5/lb, having fallen from around US\$16/lb at the start of 2019 and a high of US\$29/lb in late 2018. The fall from the exceptionally high levels of 2018 had been expected but overshot and remained below historic average prices throughout 2020, most likely as a result of reduced world-wide construction during the Covid-19 pandemic. The price has been rising since the start of 2021 and is now at over US\$8.00 per lb.

The Directors expect demand in the longer-term to be strong for a number of reasons:

- Post Covid-19 stimulus infrastructure development expected around the world, especially with the stimulus programme in the USA, causing a significant rise in consumption of vanadium-containing structural steel;
- Increasing use of vanadium for micro-alloying of steel, enabling smaller sections to be used to obtain the same strength and thereby reducing the CO<sub>2</sub> emissions caused by construction;
- Growing penetration of vanadium redox flow batteries for long-term grid energy storage; and

Whilst this demand can be met from vanadium projects currently under evaluation, the cash cost of production of this new capacity and the associated capital costs implies the need for a significantly higher vanadium price than today's, giving an expectation that the price will need to rise before such projects become financeable. By contrast, the Company's Balausqandiq deposit is expected to be able to produce vanadium pentoxide at a cost of less than half that of other primary producers.

#### *Earnings and cash flow*

The Group reported revenues of US\$2.4m for the period compared to US\$1.8m in 2019, reflecting the considerable increase in production and shipping.

Revenue, and the corresponding trade receivable, are recognised at the time of transfer of control to the customer but, as is common in the industry, the final price determination is often based on assay and prices after arrival of the goods at the port of destination. Therefore, revenues recognised at the time of shipment are subject to adjustment to prices prevailing up to four months later. Typically, the customer makes a provisional payment based on volumes, quantities and spot prices at the date of shipment and makes a final payment once the product has reached its final destination. As a result, when prices are rising, the final receipt can exceed the initial revenue recorded and vice versa. Where prices decrease significantly, this can result in the Company being in a net payable position if a downward adjustment to the consideration exceeds the provisional payment received.

Amounts receivable from or payable to customers for sales which are still subject to final price determination are initially recorded at the estimated fair value at the time of shipment, with changes in fair value recorded as other revenue. Changes in this fair value during the year and, for those sales where the final determination has not been made, fair values assessed on the basis of prices prevailing at the year end, increased revenue by US\$0.07m to US\$2.37m (2019: decrease by US\$0.55 to US\$1.84m). In periods of rising prices this adjustment would be expected to be positive and in the long run such pluses and minuses can be expected to even out. The final price determinations made after the end of 2020 in respect of sales made before the end of the year were not significantly different from the fair value assessed at the end of the year.

US\$000	2020	2019
Revenue from shipments recorded at the price at time of dispatch	2,300	2,391
Adjustments to revenue after final price determination and fair value changes	73	(550)
Revenue	2,373	1,841

Cost of sales increased to US\$3.8m from US\$3.2m in 2020 primarily reflecting the increased volumes and increases in the price of the vanadium concentrate purchased at the high prices prevailing in 2019 and utilised in 2020. The largest part of cost of sales is the purchase of raw materials, the price for which is determined as a percentage of the value of the content of vanadium at prices prevailing at the time of purchase. Since such materials are purchased up to several months before processing, and sales price determination is made several months after shipment, the prices used as a basis for the calculation of raw material prices were significantly higher than the price used as a basis for product sales. This means that the operating margin was squeezed as prices were kept low in 2020. Again, during times of rising prices this effect would be reversed and is likely to even out in the long term as prices move up and down.

Administrative expenses of US\$2.2m (2019: US\$1.8m) principally comprised employee costs, listing costs, audit and professional services. The costs directly relating to the listing on the London Stock Exchange amounted to US\$0.103m (2019: US\$0.304m).

Net finance costs were US\$0.133m (2019: net finance costs US\$0.183m) as a result of the tenge devaluation and sales in USD and RUR. US\$0.03m costs are related to bonds' coupons.

The Group made a loss before tax of US\$3.94m (2019: loss before tax of US\$3.34m).

Net cash outflows from operating activities totalled US\$1.3m (2019: US\$4.5m) with the reduction principally reflecting tight management of working capital. Changes in trade receivables increased to US\$0.1m (2019: minus US\$0.4m). Changes in trade payables increased to US\$0.5m (2019:

minus US\$0.4m) by making payment terms with suppliers of raw materials more favourable for the Company and change in inventory which generated a cash inflow of \$1.0m (2019: \$1.0m outflow).

Net cash outflows from investing activities totalled US\$1.1m (2019:US\$2.3m) and included US\$0.73m (2019:US\$2.3m) of capital expenditure associated with expanding the processing operation and US\$0.33 (2019: nil) of expenditure on the feasibility study for the exploration and evaluation asset.

Net cash inflows from financing activities included subscriptions for shares amounting to US\$1.6m and bonds amounting to US\$0.9m.

The Group had cash of US\$0.707m at 31 December 2020 (2019: US\$0.648m).

#### *Key performance indicators*

The Group is in a period of development and its current operations, the processing of bought-in secondary vanadium-containing materials for extraction of vanadium, are relatively small in comparison with the main objective of the Group to develop the Balasausqandiq mine and processing facility. Moreover, the current operations are themselves undergoing a significant expansion which means that operations are not in a steady state capable of meaningful inter-period comparisons. The directors are therefore of the opinion that Key Performance Indicators may be misleading if not considered in the context of the development of the operation as a whole for which the information for shareholders is better given in a descriptive manner than in tabular form.

Furthermore, the existing processing business of the company is complex and the business model has been developed to allow maximum flexibility in the type of raw-materials treated so that market variations in raw material prices can be moderated by the ability to select raw materials which may be more profitable to treat notwithstanding they be of lower grade and result in a lower level of production. Nevertheless, the directors consider that the main indicator of performance, although subject to interpretation as described above, is the level of production. This has been dealt with in the section “Production” above.

Environmental matters are of paramount importance to the Group. Up to this date most of the residues from the main raw materials treated have been used for the construction of evaporation ponds and the Company has started to produce low grade nickel concentrate as by-product from the residues of high grade vanadium concentrate and signed long term contract for selling it. As a result no residues from the production of ammonium metavanadate, calcium molybdate and low grade nickel concentrate are left. No significant mining operations have yet been carried out but plans are being developed at an early stage to ensure the highest standards for site rehabilitation at the sites of future mining.

#### *Balance sheet review*

Total non-current assets increased to US\$5.101m from US\$5.089m principally due to the capitalisation of the feasibility study as exploration and evaluation assets. The increase in prepayments for equipment is largely related to prepayments made for construction of the new Power Line (US\$1m).

Current assets decreased from US\$2.47m to US\$1.66m, principally reflecting decrease in inventory.

#### *Corporate*

On 28 March 2019 the Company was admitted to listing on the London Stock Exchange, raising £5.2m gross, equivalent to US\$6.9m, or US\$6.6m net of issue costs. The Company listed on the new Astana International Stock Exchange (AIX) on 6 January 2020 and consequently delisted from the Kazakhstan stock exchange (KASE) on 21 February 2020.

During 2020 the Company raised equity finance of US\$1.7m (US\$1.6m after expenses) and issued bonds to the value of US\$0.9m. Since the start of 2021 the Company has raised US\$475,829 from further issues of 242 bonds, with 58 issued in February and a further 184 issued on 12 March 2021. All the bonds have been issued on the Astana Stock Exchange ("AIX") with a nominal value of US\$2,000 each, have a coupon of 5.8% payable twice-yearly, are unsecured and are repayable on 17 March 2023. Some of the bonds issued in 2020 (256) had an early redemption right for the holders. Each issue is made at a premium or discount as negotiated at the time of issue.

On the 7 June 2021, pursuant to the Investment Agreement signed in March 2021, Vision Blue Resources invested a further US\$1.6m in equity in addition to the investment of US\$1.5m already made.

During 2020 the Group's main operating company in Kazakhstan was audited by the tax authorities for the purpose of receiving a reimbursement of excess VAT for the period from 2015 to 31 March 2020. Following the completion of the audit, a repayment of 116,000,000 KZT (approximately US\$276,000) was received. VAT of \$301,000 was written off as non-refundable. During 2020 VAT receivables increased by \$230,000, mainly due to VAT on imports and a reduction of \$101,000 in the VAT receivable was made to reflect a decision by the tax authorities, resulting to the ending balance of \$205,000. In 2021 the Company applied for a refund of this amount. It is expected that VAT receivable will be reimbursed on a quarterly basis.

*Description of principal risks, uncertainties and how they are managed*

(a) Current processing operations:

Current processing operations make up a small part of the Group's expected future value but provide useful cash flows in the near term and allow the group to gain valuable experience of the vanadium industry. The principal risk of this operation is the price of its product, vanadium. The price of vanadium pentoxide is volatile and rose from historic lows at the beginning of 2016 to a near-record high of nearly US\$30/lb near the end of 2018. Currently, the price of vanadium pentoxide is at around US\$8.00/lb which is close to the ten-year average to date. Most forecasters anticipate that vanadium will be in deficit in the short to medium term, resulting in some increase in current prices, and will return to the long-run marginal cost of production in the longer term which may be substantially higher. The Company acquires raw-materials at a cost that is related to the price of vanadium so there is a natural hedge but there is a risk of changes in vanadium prices between the time of acquisition of the raw materials and sale of the product which cannot be entirely avoided.

The processing operation is also dependent on the continuing availability of raw materials which are subject to competition from other processors. The Company is mitigating this risk by positioning itself to treat a wide variety of potential raw-materials and maintaining low treatment costs.

The level of profitability of the current processing operation is also dependent on production levels sufficient to generate profits to cover fixed overheads. The level of production could be impacted by unanticipated production difficulties, power outages and raw-material delivery limitations. The Company aims to keep a stockpile of raw-materials and has installed a larger capacity generator to maintain production during outages.

The Company is currently carrying out an expansion project which will lower the average cost of production and as part of this project, will be connecting to a larger capacity and more reliable power supply as described above. Although a substantial part of this expansion has already been completed, the plans include completion of the link to the adjacent high voltage powerline and the installation of an electric arc furnace. The full benefits of the expansion depend upon the raising of sufficient finance and the successful completion of these projects.

(b) Covid-19:

There remains a risk that the Covid-19 crisis worsens in Kazakhstan. This could cause further disruption to supply-lines, staffing and subcontractors as has already occurred, but it is also possible that a case might arise on site requiring a temporary shutdown of operations and create further pricing volatility. In addition, Covid-19 may impact the availability of finance or the terms which are available. Whilst it is not possible to guard against this, the Company continues to take all recommended precautions and will aim to maintain higher than normal stores of essential supplies on site. In terms of funding, cash flows are monitored on a continuous basis to enable the Company to take proactive measures to safeguard liquidity.

(c) Financing risk:

The Company is in stronger financing position relative to the prior year. In March of 2021 the Company signed an investment agreement with Vision Blue Resources. Under the terms of this agreement, an initial investment of \$3.1m has been made which will fund capital projects and Vision Blue has the right to subscribe further amounts which, if exercised, will bring the total up to \$12.6m. Since the current share price is greatly in excess of the option price, the directors expect this investment to be made. However, as detailed in note 1, a material uncertainty in respect of going concern is considered to exist as a result of the risks and uncertainties associated with Covid-19.

(d) Climate change risk:

On the 2-13 December 2019 the UN Climate Change Conference was held in Madrid. During the annual conference, countries' approaches to the implementation of actions in the field of climate change, based on the provisions of the United Nations Framework Convention on Climate Change, the Kyoto Protocol and the Paris Agreement, were agreed. Kazakhstan participated in the conference and reconfirmed that as a part of the international community focusing on reducing risk of climate change it is committed to reduce greenhouse gas emissions by 15% by 2030 (from the levels of 1990). Additionally, Kazakhstan is planning to develop a concept of low carbon development by 2050 which is expected to be finalised and published during June 2021.

The Company is following the development of Government strategy in relation to the Global Climate Change. During 2020 the Company emitted 24.21 tonnes of carbon oxides compared with the permitted level of 50.33 tonnes. The Company will be reviewing the Government concept of low carbon development after its publication and will develop its strategy related to Climate Change accordingly.

(e) Risks associated with the developing nature of the Kazakhstan economy:

According to the World Bank, Kazakhstan has transitioned from lower-middle-income to upper-middle-income status in less than two decades. Kazakhstan's regulatory environment has similarly developed and the Company believes that the period of rapid change and high risk is coming to an end. Nevertheless, the economic and social regulatory environment continues to develop and there remain some areas where regulatory risk is greater than in developed economies.

(f) Balasausqandiq project:

The Balasausqandiq project is a much larger contributor to the Group's value than current operations and is primarily dependent on long term vanadium prices. The Company's long-term assumption is US\$7.50/lb of vanadium pentoxide, but the forecast low cost of production means that the project would remain profitable at lower price levels.

The project is also dependent on raising finance to meet capital costs anticipated to amount to in excess of US\$100m for the first phase. Raising this money will be dependent on the successful outcome of the western bankable feasibility study which is ongoing. The favourable financial and other characteristics of the project determined by studies so far completed give the directors

confidence that the outcome of the study will be successful. Initial discussions with the providers of finance, including with the Development Bank of Kazakhstan for which our project has passed through initial screening, have been encouraging.

**Signed on behalf of the Board of Directors on 25 June 2021**

## **DIRECTORS' REPORT**

The Directors present their annual report and the financial statements of the Group for the year ended 31 December 2020.

### **General**

The Company was incorporated as a limited liability company in the British Virgin Islands on 18 April 2000 and re-domiciled to Guernsey as a Guernsey non-cellular limited company with company registration number 63449 on 12 April 2017. The Company's principal place of business is Guernsey. The Company is subject to the City Code. The Existing Ordinary Shares of Ferro-Alloy Resources Limited have been listed in the Standard segment of the London Stock Exchange since 28 March 2019. On 6 January 2020 its shares were listed on the Astana International Stock Exchange ("AIX") having previously been listed on the Kazakhstan Stock Exchange. On 21 February 2020 it delisted from the Kazakhstan Stock Exchange.

### **Principal Activity**

The Company is the holding company of a mining and mineral processing business with operations located at the Balasausqandiq vanadium/polymetallic mineral deposit in Kyzylordinskaya Oblast in Southern Kazakhstan.

### **Development plan**

The main objective of the Company is to bring into production the Balasausqandiq mine and to build a processing plant to treat one million tonnes of ore per year (Phase 1) and later increase to a total of four million tonnes per year (Phase 2). Phase 1 is expected to take two years to design and build, and Phase 2 will be started as soon as commissioning of Phase 1 has been successfully concluded. Production is expected to be 5,600 tonnes per year and 22,400 tonnes per year of vanadium pentoxide from Phases 1 and 2. Further income is expected from by-products which will account for around one third of revenue. Owing to the unique type of ore and the level of infrastructure already existing, the capital and operating costs of this operation are expected to be a fraction of those of other vanadium projects and producers. The net present value of Phases 1 and 2 combined is estimated to be around US\$2 billion.

As part of the feasibility study into the Balasausqandiq project a pilot plant with a capacity of 15,000 tonnes per year of ore was built and operated successfully. After completing the test programme it was converted to production from bought-in concentrates which, being of higher grade than mined ore, enabled it to produce at a commercial level. It is now being expanded to make it a fully commercial plant, potentially making a significant contribution to the capital costs of Phase 1 of the Balasausqandiq project. The existing operation and Phase 1 together are expected to provide sufficient finance for Phase 2.

### **Business Review**

A review of the business during the year is included in the Report on Operations. The Group's business and operations and the results thereof are reflected in the attached financial statements. In addition, refer to note 25 of the financial statements for financial instrument risks.

### **Business Risks**

A review of the key risks to the Company is set out in the Report on Operations.

## Advisers

The Company's advisers are set out below:

Broker UK	Shore Capital Stockbrokers Limited 57 St James Street, Cassini House London SW1A 1LD <a href="http://www.shorecap.co.uk">www.shorecap.co.uk</a>
Kazakhstan	Tengri Partners Investment Banking (Kazakhstan) JSC 17 Al-Farabi Avenue Almaty 050059 Kazakhstan <a href="http://www.tengricap.com">www.tengricap.com</a>
Other	VSA Capital Group Limited 15 Eldon St. London EC2M 7LD <a href="http://www.vsacapital.com">www.vsacapital.com</a>
Lawyers – Guernsey	Collas Crill LLP Glategny Court, Glategny Esplanade St Peter Port, Guernsey GY1 4EW
Auditors	BDO LLP 55 Baker Street London W1U 7EU
Bankers	Barclays Bank PLC Le Marchant House St Peter Port Guernsey GY1 3BE
Registrars	Computershare Investor Services (Guernsey) Limited The Pavilions, Bridgwater Road, Bristol BS99 6ZY United Kingdom <a href="http://www.computershare.com">www.computershare.com</a>
Financial PR & Investor Relations	St Brides Partners Limited 100 Bishopsgate London EC2N 4JL <a href="http://www.stbridespartners.co.uk">www.stbridespartners.co.uk</a>

## **Financial Results**

During the 12 months ended 31 December 2020, the Company reported a loss of US\$3.9m (2019: loss of US\$3.3m).

No dividends have been declared in respect of the years ending 2020 or 2019.

## **Directors**

After completion of the Initial Investment in June 2021 by Vision Blue Resources, the Board of the Company has change and now comprises of two executive directors and four non-executive directors whose biographical details are as follows:

### **Sir Mick Davis, Non-executive Chairman**

Sir Mick Davis holds a number of directorships at private companies and is a highly successful mining executive accredited with building Xstrata plc into one of the largest mining companies in the world prior to its acquisition by Glencore plc. Before listing Xstrata on the LSE as CEO he was CFO of Billiton plc and Chairman of Billiton Coal which he joined from the position of Eskom CFO.

During his career in mining he has raised almost US\$40bn from global capital markets and successfully completed over US\$120bn of corporate transactions, including the creation of the Ingwe Coal Corporation in South Africa; the listing of Billiton on the LSE; the merger of BHP and Billiton; as well as numerous transactions at Xstrata culminating in the sale to Glencore plc.

Sir Mick Davis is a Chartered Accountant by profession, and holds an honours degree in Commerce from Rhodes University, South Africa and an Honorary Doctorate from Bar Ilan University, Israel.

### **Nicholas Bridgen, Chief Executive**

Nick Bridgen started his career in 1975 as a Chartered Accountant at Peat Marwick Mitchell & Co (now KPMG). In 1979, he moved to the Rio Tinto Group, becoming senior group accountant in 1981. He then moved to the Business Evaluation Department for the Group in 1985 and was Group Planning Manager for the RTZ Pillar Group which held the engineering, building products and chemical companies. Nick spent 14 years with Rio Tinto. In the mid-1990s, he was finance director at Bakyrchik Gold Plc. and in 1998, he founded Hambledon Mining Plc which acquired the Sekisovskoye gold project, listing the company on AIM and taking the project from exploration, through construction and into a producing mine.

Since 2006, Nick has been a director and more recently, CEO, of Ferro-Alloy Resources Limited. In the role of CEO Nick is ultimately responsible for all aspects of the Ferro-Alloy Resources Group. He holds a Bachelor's degree with honours from Exeter University, is a Chartered Accountant and has also studied corporate finance at London Business School. He is a fluent Russian speaker.

### **Andrey Kuznetsov, Director of Operations**

Andrey Kuznetsov started his career in 1981 as an industrial engineer at Kirov Engineering Plant in Almaty. After three years he became Chief of the Scientific Department in Central Committee of Youth (Comsomol). In 1987, Andrey became general director of the Almaty NTTM "Kontakt" centre. In 1995-1996, he was the CEO of the Kazakhstan subsidiary of Alfa-Bank. Andrey has been the general director of TOO Firma Balausa since 2006. He holds a Specialist's degree in electrical engineering from Bauman Moscow State Technical University and a PhD in informal mathematical logic. He has also studied management at Coventry University.

As Director of Operations Andrey is responsible for the management of operations in Kazakhstan and execution of the Company strategy and policies approved by the Board.

**Chris Thomas, Non-executive Director, chairman of the remuneration committee and member of the audit committee**

Chris Thomas has nearly 35 years' experience in the communications industry. He has held various high-level management positions including CEO of Proximity London from 2003 to 2006 - one of the largest direct and digital agencies in London. In 2006, Chris was appointed Chairman & CEO of BBDO and Proximity in Asia, subsequently adding the Middle East and Africa to his responsibilities. He worked with major multinational companies across the growth markets of SE Asia, China, India and Africa. In May 2015, Chris moved to New York to take up the role of CEO of BBDO in the Americas, with responsibility for 21 agencies in the U.S., Canada and Latin America. In February 2019 he stepped down from his Americas role and remained Chairman of I&S BBDO in Japan until April 2021. He also served as a non-executive director on the board of Hambleton Mining from 2004 to 2011. He is an independent director of Clear Media Ltd, a Chinese media business listed on the Hong Kong Stock Exchange

Chris is the chairman of the Remuneration Committee which considers and approves the remuneration of all senior executives including that of the executive directors.

**Peet Nienaber, Non-executive Director**

Peet Nienaber has several decades of experience in the mining sector, most notably spending over 24 years with what became Xstrata plc. At Xstrata he was initially Head of Operations, spearheading the earliest days of the company, including its growth to be the largest producer of Ferrochrome. Thereafter he spent 10 years as CEO of Xstrata Alloys, one of the largest producers of Ferrochrome and a leading producer of Vanadium, with some 20,000 people under Peet's leadership. After retiring from the position in 2012, Xstrata Alloys subsequently went on to be acquired by Glencore plc.

Mr. Nienaber began his career as an engineer at Iscor Ltd before spending several years in the Ferroalloys industry at Samancor and Anglo American Plc.

**James Turian, Non-executive Director, chairman of the audit committee and member of the audit committee**

James Turian started his career in 1986 and has a background in accounting, trust and management. James has previously been involved with several mining companies in Perth, Australia, including assisting Cooper Energy in their restructuring in the early 2000s. From 2000 to 2011 James owned and operated a trust company in Guernsey which he sold to concentrate on accountancy and currently is a director of “Accounts For You Limited”, a Guernsey accountancy firm. He holds several other directorships. James is a Chartered Fellow of the Securities Institute IAQ and is a Fellow of the Institute of Directors.

James is the chairman of the audit committee where he is responsible for chairing the audit committee meetings.

**Directors' Remuneration**

	Salary/ fees (US\$'000)		Benefits (US\$'000)		Pension (US\$'000)		Bonus/other (US\$'000)		Total (US\$'000)	
	2019	2020	2019	2020	2019	2020	2019	2020	2019	2020
<b>Non-Executive Chairman</b>	30	30	nil	nil	nil	nil	nil	nil	<b>30</b>	<b>30</b>
<b>Non-Executive director</b>	30	30	nil	nil	nil	nil	nil	nil	<b>30</b>	<b>30</b>
Chief executive director	235	240	nil	nil	nil	nil	nil	nil	<b>235</b>	<b>240</b>
Operations director	155	195	nil	nil	nil	nil	nil	nil	<b>155</b>	<b>195</b>
<b>Total</b>	<b>450</b>	<b>495</b>	<b>nil</b>	<b>nil</b>	<b>nil</b>	<b>nil</b>	<b>nil</b>	<b>nil</b>	<b>450</b>	<b>495</b>

In June 2020 the Company issued 764,050 ordinary shares of no par value at 8p per share in lieu of fees in the amount of \$75,000.

The directors remuneration in cash is paid in GBP, converted from USD at the exchange rate prevailing at the time of payment.

**Principal shareholders**

A list of shareholders who beneficially hold more than 5% of the Company's shares at 25 June 2021 is as follows:

Name of shareholder	Number of ordinary shares	Percentage of voting rights
Andrey Kuznetsov	68,517,333	19.3
Nicholas Bridgen	49,738,800	14.0
Vision Blue Resources and co-investors *	24,741,021	7.0

\*Pursuant to the Investment Agreement signed with Vision Blue Resources Limited, Vision Blue Resources Limited has acquired 15,961,948 shares, equal to 4.49% of the Company's share capital and co-investors have acquired 8,779,073 shares, equal to 2.47%.

## Interests of directors

The interests (all of which are beneficial and include related parties) of the Directors in the Company's issued share capital at 31 December 2020 and at 25 June 2021 are as follows:

Name of director	Position	31 Dec 2020 Number of Ordinary Shares	31 Dec 2020 % of Share Capital	25 June 2021 Number of Ordinary Shares	25 June 2021 % of Share Capital
Sir Mick Davis	Chairman	-	-	15,961,948*	4.5
Nicholas Bridgen	Chief executive	64,738,800	21.2	49,738,800	14.0
Andrey Kuznetsov	Operations director	70,184,000	19.6	68,517,333	19.3
Christopher Thomas	Non-executive director (formerly Chairman)	4,738,512**		5,758,512**	1.6
James Turian	Non-executive director	62,687	0.1	444,712	0.1

\* Sir Mick Davis is Chairman of Vision Blue Resources Ltd and the beneficiary of a Trust that is a shareholder in Vision Blue Resources Ltd and therefore indirectly has an interest in that company's investment in Ferro-Alloy Resources Ltd arising from the agreement between both companies which was signed on 15 March 2021 that is set out in the going concern paragraph below.

\*\* Including shares of Assiduous Group Ltd which holds 5,203,800 Ordinary Shares (1.46%). Assiduous Group Ltd is an investment vehicle in which Christopher Thomas is the sole shareholder and director.

The Company has issued 382,025 shares to each of Mr. Thomas and Mr. Turian for their services as non-executive directors for the fourth quarter of 2019 and the whole of 2020, amounting to \$37,500 each.

## Website Publication

The Directors are responsible for ensuring that the annual report and the financial statements are made available on a website. Financial statements are published on the Company's website ([www.ferro-alloy.com](http://www.ferro-alloy.com)) in accordance with applicable legislation in Guernsey governing the preparation and dissemination of financial statements, which may vary from legislation in other jurisdictions. The maintenance and integrity of the Company's website is the responsibility of the Directors. The Directors' responsibility also extends to the ongoing integrity of the financial statements contained therein.

## Going Concern

Refer to note 1(d) for details of going concern including the identified material uncertainty

Auditor

BDO LLP was appointed as auditors to the Company in the period. BDO LLP has expressed its willingness to continue in office as auditors and a resolution to re-appoint BDO LLP will be proposed at the forthcoming annual general meeting.

**Signed on behalf of the Board of Directors on**

**25 June 2021**

## **Responsibility statements**

### ***Directors' Responsibility Statement***

The Companies (Guernsey) Law, 2008 requires the Directors to prepare financial statements for each financial period which give a true and fair view of the state of affairs of the Group for that period and of the profit or loss of the Group for that period. Under that law they have elected to prepare the financial statements in accordance with International Financial Reporting Standards as adopted by the EU and applicable law. In preparing those financial statements the Directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgments and estimates that are reasonable and prudent;
- State whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group will continue in business.

The Directors are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Group and to enable them to ensure that the financial statements have been properly prepared in accordance with the Companies (Guernsey) Law, 2008. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors confirm that they have complied with the above requirements in preparing the financial statements.

So far as each of the Directors are aware, there is no relevant audit information of which the Group's auditor is unaware; having taken all the steps the Directors ought to have taken to make themselves aware of any relevant audit information and to establish that the Group's auditor is aware of that information.

To the best of the Directors' knowledge:

- a) the financial statements, prepared in accordance with International Financial Reporting Standards as adopted by the EU and applicable law, give a true and fair view of the assets, liabilities, financial position and profit or loss of Ferro-Alloy Resources Limited and the undertakings included in the consolidation as a whole; and
- b) the management report includes a fair review of the development and performance of the business and the position of Ferro-Alloy Resources Limited and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face.

## **Governance statement**

### *General*

As a consequence of the Ordinary Shares being admitted to the standard segment of the Official List, the requirements of the UK Corporate Governance Code, published by the Financial Reporting Council (the “Corporate Governance Code”), does not apply to the Company. The Guernsey Corporate Governance Code does not apply to the Company since the Company is not regulated by the Guernsey Financial Services Commission. However, the Board recognises the importance of good corporate governance and has implemented corporate governance practices having consideration to the recommendations and principles of the UK Corporate Governance Code and DTR 7.2 in accordance with the listing rules as far as is considered appropriate by the Board whilst considering the size and nature of the business.

The Board of Directors of the company is responsible for the overall corporate governance of the consolidated Group, guiding and monitoring the business and affairs of the company on behalf of the shareholders by whom they are elected and to whom they are accountable.

### *Composition of the Board*

The number of Directors as specified in the Articles of Incorporation of the Company is a minimum of one and up to a maximum of seven. Under the terms of the investment agreement entered into with Vision Blue Resources, Sir Mick Davis will become the Chairman of the Company (with Chris Thomas, the existing chairman, remaining as a non-executive director) after completion of the initial investment, and Vision Blue Resources has the right to appoint a further director subject to the Company’s consent. Having regard to the Company’s stage of development, the directors believe that the size of the current board comprising four directors, two of whom are executive and two are non-executive, with the addition of two further directors from Vision Blue Resources, is appropriate. The directors intend that there will always be at least as many non-executive directors as there are executive directors.

### *Board Committees*

The Company has created an audit committee that is responsible for considering all financial reporting matters and ensuring that they are properly reported and monitored. It is also responsible for the review and assessment of the independence of the external auditors and approval of any non-audit services, review of the external audit strategy and findings, assessment of whether an internal audit function is necessary considering the activities and size of the business and oversight of significant financial reporting matters. The committee is chaired by Mr James Turian and Mr Chris Thomas is a member. Mr Turian has a background in accounting, trust and management and is a director of a firm of accountants in Guernsey which the board considers to be recent and relevant experience to carry out his responsibility as chairman.

The Company has also created a remuneration committee to consider all matters related to salary and benefits of senior staff and executive directors. The remuneration of non-executive directors is a matter for the board as a whole. No director will take part in discussions concerning his own remuneration package. Mr Chris Thomas has been appointed chairman of the committee and Mr James Turian is a member.

The directors are of the opinion that due to the nature and size of the Company and its current board of directors, the functions often carried out by a nomination committee can be more successfully conducted by the full board of directors so no such committee has been created.

### *Code of conduct*

The goal of establishing the Company as a significant mining and processing Company is underpinned by its core values of honesty, integrity, common sense and respect for people.

The Company desires to remain a good corporate citizen in all the jurisdictions within which it operates, and to appropriately balance, protect and preserve all stakeholders' interests. In particular, the Company gives paramount concern to the safety of its employees and the maintenance of high environmental standards.

#### *Shareholder communication*

The Board aims to ensure that shareholders and investors have equal access to the Company's information.

The company aims to promote effective communication with shareholders and encourage effective participation at general meetings through a policy of open disclosure to shareholders, regulatory authorities and the broader community of all material information with respect to the company's affairs.

#### *Internal control and risk management systems*

The Company's accounting and finance team is small and subject to close control by the executive directors. For this reason, the Audit Committee and the Board are of the opinion that it is not appropriate for there to be a separate internal control department or internal audit function but has implemented various procedures and internal controls to provide assurance to directors that accounting and financial risks are adequately controlled. These include:

- The preparation and regular updating of cash flow forecasts, changes to which are closely monitored by executive directors who discuss necessary changes on almost a daily basis
- There is a Kazakhstan group finance manager, employed in a Group services company, to oversee and control the quality of financial reporting of operating companies in Kazakhstan and perform group accounting and financial roles
- Significant contracts require approval by members of the Board
- All Group payments must be authorised by a director and payments by the Group parent company, Ferro-Alloy Resources Limited, require two directors' signatures on all payments over US\$5,000

## **INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF FERRO-ALLOY RESOURCES LIMITED**

### **Opinion on the financial statements**

In our opinion, the financial statements:

- give a true and fair view of the state of the Group's affairs as at 31 December 2020 and of its loss for the year then ended;
- have been properly prepared in accordance with IFRSs as adopted by the European Union; and
- have been properly prepared in accordance with the requirements of the Companies (Guernsey) Law, 2008.

We have audited the financial statements of Ferro-Alloy Resources Limited ("the Company") and its subsidiaries ("the Group") for the year ended 31 December 2020 which comprise the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of financial position, the consolidated statement of changes in equity and the consolidated statement of cash flows and notes to the financial statements, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and International Financial Reporting Standards (IFRSs) as adopted by the European Union.

### **Basis for opinion**

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### **Independence**

We are independent of the Company and the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard as applied to listed entities and we have fulfilled our other ethical responsibilities in accordance with these requirements.

### **Material uncertainty in relation to going concern**

We draw attention to note 1(d) in the financial statements which sets out the Directors' considerations of the further potential impact of the COVID-19 pandemic, including on its operations and volatility in commodity prices, which may require the Group to obtain additional funding to proceed with the development of its assets. There is no certainty that the funding required by the Group will be secured within the necessary timescale. As stated in note 1(d), these circumstances along with other matters set out in note 1(d) indicate that a material uncertainty exists that may cast significant doubt on the Group's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

In auditing the financial statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate. We also considered going concern to be a Key Audit Matter based on our assessment of the risk and the effect on our audit. Our evaluation of the Directors' assessment of the Group's ability to continue to adopt the going concern basis of accounting and in response to the key audit matter included:

- We discussed the further potential impact of Covid-19 with management and the Audit Committee, including their assessment of risks and uncertainties associated with areas such as production disruption and commodity price volatility. We formed our own assessment of risks and uncertainties based on our understanding of the business and mining sector in Kazakhstan.
- We considered sensitivity and reverse stress test scenarios to assess the potential impact on liquidity of scenarios including production disruption and adverse changes in commodity prices and management's assessment of whether such scenarios were reasonably possible. We evaluated management's judgment that adequate funding would be available if required, which included inspecting investor agreements for proposed funding for the project and considering the history of fund raising.
- We held discussions with management and the Audit Committee regarding the status of discussions with Vision Blue Resources regarding the timing and nature of the proposed additional funding.
- We obtained management's base case cash flow forecasts and assessed the key inputs including commodity prices, production levels, operating costs and planned capital expenditure. In doing so we compared the commodity price forecasts to market outlook reports, considered the appropriateness of the production mix and growth plans against historical performance and the effect of capital expansion works completed to date and planned, evaluated cost assumptions against historic trends and compared the capital expenditure to feasibility studies and approved capital budgets.
- We agreed funds raised subsequent to year end to agreements and confirmed receipts to bank and reviewed the terms of the Vision Blue Resources investment agreements to assess the extent to which they remained conditional.
- We confirmed the terms of the existing contractual debt agreements, including the forecasted maturities and confirmed that they were appropriately reflected in the forecasts based on their earliest contractual maturity dates.
- We reviewed the adequacy and completeness of the disclosure included within the financial statements in respect of going concern against the requirements of the relevant accounting standards.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

## Overview

<b>Coverage</b>	<i>100% (2019: 100%) of Group loss before tax</i> <i>100% (2019: 100%) of Group revenue</i> <i>100% (2019: 100%) of Group total assets</i>		
<b>Key audit matters</b>		2020	2019
	<i>Assessment of impairment of Property, Plant &amp; Equipment</i>	☑	☑
	<i>Revenue recognition</i>	☑	☑
	<i>Going concern</i>	☑	☑
<b>Materiality</b>	<i>Group financial statements as a whole</i> \$101,000 (2019: \$115,000) based on 1.5% (2019: 1.5%) of total assets		

## An overview of the scope of our audit

Our Group audit was scoped by obtaining an understanding of the Group and its environment, including the Group's system of internal control, and assessing the risks of material misstatement in the financial statements. We also addressed the risk of management override of internal controls,

including assessing whether there was evidence of bias by the Directors that may have represented a risk of material misstatement.

We identified two significant components, being the principal operating subsidiary Firma Balausa LLC and the parent company Ferro-Alloy Resources Limited. Our group audit strategy focused on these and both of the significant components were subject to a full scope audit. The audits of both of the significant components were principally performed in Kazakhstan by a local BDO member firm under the direction and supervision of the Group audit team. The Group consolidation was also subject to a full scope audit and was performed by the Group audit team. The remaining four components of the Group were considered non-significant and these components were principally subject to analytical review procedures by the Group audit team.

*Our involvement with component auditors*

For the work performed by component auditors, we determined the level of involvement needed in order to be able to conclude whether sufficient appropriate audit evidence has been obtained as a basis for our opinion on the Group financial statements as a whole. Our involvement with component auditors included the following:

- Detailed Group reporting instructions were sent to the component auditor, which included the significant areas to be covered by the audit (including areas that were considered to be key audit matters as detailed above), the level of component materiality, and set out the information required to be reported to the Group audit team.
- The Group audit team reviewed the component auditor's work papers remotely, as a result of Covid-19 travel restrictions, and held regular calls with the component audit teams during the audit.
- We held calls and meetings with members of Group and component management to discuss accounting and audit matters arising.
- The Group audit team was actively involved in the direction of the audits performed by the component auditor for Group reporting purposes, along with the consideration of findings and determination of conclusions drawn. We performed our own additional procedures in respect of certain of the significant risk areas that represented Key Audit Matters in addition to the procedures performed by the component auditor.

*Key audit matters*

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) that we identified, including those which had the greatest effect on: the overall audit strategy, the allocation of resources in the audit, and directing the efforts of the engagement team. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. In addition to going concern, described in the Material uncertainty related to going concern section above, we determined the matters described below to be the key audit matters to be communicated in our report.

<b>Key audit matter</b>	<b>How the scope of our audit addressed the key audit matter</b>
<p><i>Assessment of impairment of Property, Plant &amp; Equipment (PP&amp;E).</i></p> <p>See notes 2 and 12</p>	<p>We obtained management's NPV forecasts for the processing operation and evaluated the appropriateness of the use of the FVCS methodology, which includes future capital expenditures for expansion and development when such expenditure would reasonably be incurred by a market participant.</p>

<p>At 31 December 2020, management have undertaken an impairment test on the processing operation assets which form the Group's PP&amp;E.</p> <p>This assessment required the Board to form estimates in determining inputs to forecast net present value calculations underlying the assessment of the fair value less cost to sell ("FVLCS"), including commodity prices; future production; operating costs; capital expenditure and discount rates.</p> <p>Given the estimates and judgments required this area was considered to represent a significant audit risk and key audit matter.</p>	<p>We compared commodity price forecasts to FY 2020 / 2021 actual data and third party market outlook reports.</p> <p>We evaluated the forecast growth in production and changes to production mix against historical performance and the effect of capital expansion works included in the forecast.</p> <p>We compared the operating costs to historical actuals and made inquiries of management to assess the basis for changes over time, considering the consistency of the assumptions with the capital project plan and inspecting raw material supply agreements.</p> <p>We compared the forecast capital expenditure to the Competent Person's report which included an estimate of the capital cost for the expansion of the processing operations, the Board approved capital budgets and inspected contractual agreements where available.</p> <p>We recalculated the discount rate using external source data and compared the rate used in the impairment test to equity analyst reports.</p> <p>We performed sensitivity analysis on key inputs such as pricing, production, capital costs and discount rates to confirm that headroom remained under reasonably possible sensitivities.</p> <p>We reviewed the Competent Person's Report, market capitalisation and market analyst reports to compare the implied net present values included in those reports against the carrying value of the asset.</p> <p>We reviewed the disclosures in the financial statements against the requirements of the relevant accounting standards.</p> <p><b>Key observations:</b>  We consider that the judgements and estimates made by the Board in assessing the impairment of Property, Plant &amp; Equipment to be reasonable.</p>
<p><i>Revenue recognition</i></p> <p>The Group generated revenues of \$2.37m as detailed in note 4 based on the group's revenue recognition policy as detailed in notes 3(1) and 4.</p> <p>In particular, in applying IFRS 15 "Revenue from Customers" to the Group's contracts consideration was required regarding:</p>	<p>We assessed the revenue recognition policy for the key AMV and Calcium Molybdate revenue streams against the 5-step model of IFRS 15 to determine whether the policy remains compliant with applicable accounting standards.</p> <p>We obtained and reviewed sales agreements and terms for a sample of customers to assess the appropriateness and application of the revenue recognition policy with specific consideration of the relevant performance obligations and the point at which they are satisfied per</p>

<ul style="list-style-type: none"> <li>• The identification of the performance obligations within the contracts and the point at which performance obligations are satisfied and revenue is recorded (cut off);</li> <li>• The accounting for variable consideration associated with quality / quantity estimates required for sales prior to year end based on test data which are subject to subsequent final quality / quantity determination post year end; and</li> <li>• The accounting treatment for provisional pricing that applies under the contracts, particularly given the absence of forward market prices for AMV and Calcium Molybdate and the subsequent estimates required in determining the fair value of contract receivables and payables.</li> </ul> <p>Given the above factors we considered this area to represent a significant audit risk and key audit matter.</p>	<p>the agreements. We evaluated the accounting treatment of quality / quantity estimates and compared the estimates to actual outcomes both in the year for previously completed sales and post year end for the open sales.</p> <p>We evaluated the appropriateness of management's accounting treatment of the provisional pricing clauses for open sales against the relevant accounting standards, which gave rise to receivables and payables held at fair value. We obtained supporting shipping, delivery and other relevant sales documents to confirm the sales which had been recorded but remained subject to final price determination.</p> <p>In respect of the fair value of receivables / payables we evaluated the valuation methodology and recalculated the fair values using market data.</p> <p>We agreed a sample of revenue in the year to supporting documentary evidence. For a sample of sales around the year end we reviewed evidence such as shipping documents to check that revenue was recorded in the correct period.</p> <p>We reviewed disclosures and accounting policies for compliance with IFRS 15.</p> <p><b><i>Key observations</i></b></p> <p>We found the revenue recognition policies to be compliant with IFRS and the presentation in the financial statements to be acceptable. We found the estimates used in determining the fair value of [receivables / payables to be acceptable.</p>
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### **Our application of materiality**

We apply the concept of materiality both in planning and performing our audit, and in evaluating the effect of misstatements. We consider materiality to be the magnitude by which misstatements, including omissions, could influence the economic decisions of reasonable users that are taken on the basis of the financial statements.

In order to reduce to an appropriately low level the probability that any misstatements exceed materiality, we use a lower materiality level, performance materiality, to determine the extent of testing needed. Importantly, misstatements below these levels will not necessarily be evaluated as immaterial as we also take account of the nature of identified misstatements, and the particular circumstances of their occurrence, when evaluating their effect on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole and performance materiality as follows:

	<b>Group financial statements</b>	
	2020	2019
<b>Materiality</b>	\$101,000	\$115,000
<b>Basis for determining materiality</b>	1.5% of total assets	
<b>Rationale for the benchmark applied</b>	The Group is focused on both its exploration and production assets and is in an investment phase. We consider total assets to be the most relevant consideration of the Group's financial performance as the Group continues to focus on enhancing its assets.	
<b>Performance materiality</b>	\$75,750	\$86,250
<b>Basis for determining performance materiality</b>	75% of Group Materiality considering the nature of activities and historic audit adjustments	

#### *Component materiality*

We set materiality for each component of the Group based on a percentage of 66% of Group materiality dependent on the size and our assessment of the risk of material misstatement. Component materiality was set at \$67,000 (2019: \$70,000). In the audit of each component, we further applied performance materiality levels of 75% of the component materiality to our testing to ensure that the risk of errors exceeding component materiality was appropriately mitigated.

#### *Reporting threshold*

We agreed with the Audit Committee that we would report to them all individual audit differences in excess of \$2,400 (2019: \$3,000). We also agreed to report differences below this threshold that, in our view, warranted reporting on qualitative grounds.

#### **Other information**

The directors are responsible for the other information. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the course of the audit, or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

#### **Other Companies (Guernsey) Law, 2008 reporting**

We have nothing to report in respect of the following matters where the Companies (Guernsey) Law, 2008 requires us to report to you if, in our opinion:

- proper accounting records have not been kept by the Company; or
- the financial statements are not in agreement with the accounting records; or
- we have failed to obtain all the information and explanations which, to the best of our knowledge and belief, are necessary for the purposes of our audit.

### **Responsibilities of Directors**

As explained more fully in the Directors' responsibility statement within the Directors' Report, the Directors are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Company or to cease operations, or have no realistic alternative but to do so.

### **Auditor's responsibilities for the audit of the financial statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

#### *Extent to which the audit was capable of detecting irregularities, including fraud*

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below:

- Holding discussions with management and the audit committee to understand the laws and regulations relevant to the Group and company. These included the significant laws and regulations of Kazakhstan to be those relating to the mining industry, elements of financial reporting framework, tax legislation and environmental regulations;
- Holding discussions with management and the audit committee to determine any known or suspected instances of non-compliance with laws and regulations or fraud identified by them;
- Testing the appropriateness of journal entries made through the year by applying specific criteria to detect possible irregularities and fraud;
- Reviewing the licences to assess the extent to which the Group was in compliance with the conditions of the licence and considering management's assessment of the impact of instances of non-compliance where applicable;
- Performing a detailed review of the Group's year-end adjusting entries and investigating any that appear unusual as to nature or amount and agreeing to supporting documentation;
- For significant and unusual transactions, particularly those occurring at or near year-end, obtaining evidence for the rationale of these transactions and the sources of financial resources supporting the transactions;

- Assessing the judgements made by management when making key accounting estimates and judgements, and challenging management on the appropriateness of these judgements (refer to key audit matters above);
- Reviewing minutes from board meetings of those charges with governance to identify any instances of non-compliance with laws and regulations;
- Communicating relevant identified laws and regulations and potential fraud risks to all engagement team members and remaining alert to any indications of fraud or non-compliance with laws and regulations throughout the audit; and
- Directing the auditors of the significant components to ensure an assessment is performed on the extent of the components compliance with the relevant local and regulatory framework.

Our audit procedures were designed to respond to risks of material misstatement in the financial statements, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery, misrepresentations or through collusion. There are inherent limitations in the audit procedures performed and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we are to become aware of it.

A further description of our responsibilities is available on the Financial Reporting Council's website at: <https://www.frc.org.uk/auditorsresponsibilities>. This description forms part of our auditor's report.

### **Use of our report**

This report is made solely to the Company's members, as a body, in accordance with Section 262 of the Companies (Guernsey) Law, 2008. Our audit work has been undertaken so that we might state to the Company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company and the Company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Ryan Ferguson  
For and on behalf of BDO LLP, Chartered Accountants  
London,  
United Kingdom

25 June 2021

BDO LLP is a limited liability partnership registered in England and Wales (with registered number OC305127)

***Ferro-Alloy Resources Limited***  
*Independent auditor's report*  
*for the year ended 31 December 2020*

**Ferro-Alloy Resources Limited**  
*Consolidated Statement of Profit or Loss and Other Comprehensive Income*  
*for the year ended 31 December 2020*

	Note	2020 \$000	2019 \$000
Revenue from customers (pricing at shipment)	4	2,300	2,391
<i>Other revenue (adjustments to price after delivery and fair value changes)</i>	4	73	(550)
Total revenue	4	2,373	1,841
Cost of sales	5	(3,779)	(3,178)
<b>Gross loss</b>		<b>(1,406)</b>	<b>(1,337)</b>
Other income	6	8	70
Administrative expenses	7	(2,233)	(1,841)
Distribution expenses		(178)	(42)
Other expenses	8	-	(9)
<b>Loss from operating activities</b>		<b>(3,809)</b>	<b>(3,159)</b>
Net finance costs	10	(133)	(183)
<b>Loss before income tax</b>		<b>(3,942)</b>	<b>(3,342)</b>
Income tax	11	(2)	-
Loss for the period		<b>(3,944)</b>	<b>(3,342)</b>
<b>Other comprehensive income (loss)</b>			
<i>Items that may be reclassified subsequently to profit or loss</i>			
Exchange differences arising on translation of foreign operations		(528)	31
<b>Total comprehensive (loss) income for the period</b>		<b>(4,472)</b>	<b>(3,311)</b>
Loss per share (basic and diluted), US\$	20	(0.012)	(0.011)

These consolidated financial statements were approved by directors on 25 June 2021 and were signed on its behalf by:

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James Turian  
*Director*

The notes on pages 30 to 61 form part of these consolidated financial statements.

***Ferro-Alloy Resources Limited***  
*Consolidated Statement of Financial Position as at 31 December 2020*

**Ferro-Alloy Resources Limited**  
Consolidated Statement of Financial Position as at 31 December 2020

	Note	31 December 2020 \$000	31 December 2019 \$000
<b>ASSETS</b>			
<b>Non-current assets</b>			
Property, plant and equipment	12	2,800	3,206
Exploration and evaluation assets	13	813	59
Intangible assets	14	21	24
Long-term VAT receivable	17	-	652
Prepayments	19	1,467	1,148
<b>Total non-current assets</b>		<b>5,101</b>	<b>5,089</b>
<b>Current assets</b>			
Inventories	16	694	1,750
Trade and other receivables	17	205	35
Prepayments	18	52	38
Cash and cash equivalents	19	707	648
<b>Total current assets</b>		<b>1,658</b>	<b>2,471</b>
<b>Total assets</b>		<b>6,759</b>	<b>7,560</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
Share capital	20	35,606	33,965
Additional paid-in capital		397	397
Foreign currency translation reserve		(3,462)	(2,934)
Accumulated losses		(28,561)	(24,617)
<b>Total equity</b>		<b>3,980</b>	<b>6,811</b>
<b>Non-current liabilities</b>			
Loans and borrowings	21	412	-
Provisions	22	47	64
<b>Total non-current liabilities</b>		<b>459</b>	<b>64</b>
<b>Current liabilities</b>			
Loans and borrowings	21	524	-
Trade and other payables	23	1,736	626
Payables at FVTPL	24	60	59
<b>Total current liabilities</b>		<b>2,320</b>	<b>685</b>
<b>Total liabilities</b>		<b>2,779</b>	<b>749</b>
<b>Total equity and liabilities</b>		<b>6,759</b>	<b>7,560</b>

*Ferro-Alloy Resources Limited*  
*Consolidated Statement of Changes in Equity for the year ended 31 December 2020*

	Share capital \$000	Share premium \$000	Additional paid in capital \$000	Foreign currency translation reserve \$000	Accumulated losses \$000	Total \$000
Balance at 1 January 2019	27,330	-	380	(2,965)	(21,275)	3,470
Loss for the year	-	-	-	-	(3,342)	(3,342)
<b>Other comprehensive expense</b>						
Exchange differences arising on translation of foreign operations	-	-	-	31	-	31
<b>Total comprehensive income (loss) for the year</b>	-	-	-	<b>31</b>	<b>(3,342)</b>	<b>(3,311)</b>
<b>Transactions with owners, recorded directly in equity</b>						
Shares issued, net of issue costs	6,635	-	-	-	-	6,635
Warrants issued	-	-	17	-	-	17
<b>Balance at 31 December 2019</b>	<b>33,965</b>	<b>-</b>	<b>397</b>	<b>(2,934)</b>	<b>(24,617)</b>	<b>6,811</b>
Balance at 1 January 2020	33,965	-	397	(2,934)	(24,617)	6,811
Loss for the year	-	-	-	-	(3,944)	(3,944)
<b>Other comprehensive income</b>						
Exchange differences arising on translation of foreign operations	-	-	-	(528)	-	(528)
<b>Total comprehensive income (loss) for the year</b>	-	-	-	<b>(528)</b>	<b>(3,944)</b>	<b>(4,472)</b>
<b>Transactions with owners, recorded directly in equity</b>						
Shares issued, net of issue costs (note 20)	1,641	-	-	-	-	1,641
<b>Balance at 31 December 2020</b>	<b>35,606</b>	<b>-</b>	<b>397</b>	<b>(3,462)</b>	<b>(28,561)</b>	<b>3,980</b>

**Ferro-Alloy Resources Limited**  
*Consolidated Statement of Cash Flows for the year ended 31 December 2020*

		<b>2020</b>	<b>2019</b>
		<b>\$000</b>	<b>\$000</b>
<b>Cash flows from operating activities</b>			
<b>Loss for the year</b>		<b>(3,944)</b>	<b>(3,342)</b>
<i>Adjustments for:</i>			
Depreciation and amortisation	5, 7	431	428
Loss on write-off of property, plant and equipment plant,		-	(18)
Loss on write-off of VAT non-refundable	7	301	-
Loss on write-off of prepayments	7	7	-
Loss on write-off of receivables	7	15	
Write-down of inventories to net realisable value and obsolescence provision	5	-	208
Expenses on credit loss provision	7	15	-
Share payments and issuance of call option	20	75	17
Income tax	11	2	-
Net finance costs	10	133	183
<b>Cash from operating activities before changes in working capital</b>		<b>(2,965)</b>	<b>(2,524)</b>
Change in inventories		1,044	(989)
Change in trade and other receivables		90	(442)
Change in prepayments		(25)	53
Change in trade and other payables		517	(369)
Change in payables at FVTPL		7	(205)
<b>Net cash from operating activities</b>		<b>(1,332)</b>	<b>(4,476)</b>
<b>Cash flows from investing activities</b>			
Acquisition of property, plant and equipment	12	(733)	(2,337)
Acquisition of exploration and evaluation assets	13	(326)	
Acquisition of intangible assets	14	(1)	(1)
Proceeds from disposal of property, plant and equipment	12	-	18
<b>Net cash used in investing activities</b>		<b>(1,060)</b>	<b>(2,320)</b>
<b>Cash flows from financing activities</b>			
Proceeds from issue of share capital	20	1,649	6,939
Transaction costs on shares subscription		(82)	(304)
Proceeds from borrowings	21	924	-
Interests paid	21	(19)	-
<b>Net cash from financing activities</b>		<b>2,472</b>	<b>6,635</b>
<b>Net increase in cash and cash equivalents</b>		<b>80</b>	<b>(161)</b>
Cash and cash equivalents at the beginning of year	19	648	892
Effect of movements in exchange rates on cash and cash equivalents		(21)	(83)
<b>Cash and cash equivalents at the end of year</b>		<b>707</b>	<b>648</b>

## Note to the consolidated financial statements for the year ended 31 December 2020

### 1 Basis of preparation

Ferro-Alloy Resources Limited (the “Company”) is incorporated in Guernsey and has its registered address at Noble House, Les Baissieres, St. Peter Port, Guernsey, GY1 2UE. The consolidated financial statements for the year ended 31 December 2020 comprise the Company and the following subsidiaries (together referred to as the “Group”):

Company	Location	Company’s share in charter capital	Primary activities
Ferro-Alloy Products Limited	British Virgin Islands	100%	Dormant since 4 January 2021
Energy Metals Limited	UK	100%	Manages processing activity and performs management service
Vanadium Products LLC	Kazakhstan	100%	Performs services for the Group
Firma Balausa LLC	Kazakhstan	100%	Production and sale of vanadium and associated by-products
Balausa Processing Company LLC	Kazakhstan	100%	Development of processing facilities

#### (a) Statement of compliance

These financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by EU (“IFRSs”).

#### (b) Basis of measurement

The consolidated financial statements are prepared on the historical cost basis except as otherwise noted below.

#### (c) Functional and presentation currency

The national currency of Kazakhstan is the Kazakhstan tenge (“KZT”) which is also the functional currency of the Group’s operating subsidiaries. The functional currency of the Company is US\$. The presentation currency of the consolidated financial statements is US\$.

#### (d) Going concern

The consolidated financial statements are prepared in accordance with IFRS on a going concern basis.

The Directors have reviewed the Group’s cash flow forecasts for a period of at least 12 months from the date of approval of the financial statements, together with sensitivities and mitigating actions. In addition, the Directors have given specific consideration to the continued risks and uncertainties associated with the COVID-19 pandemic and considered reverse stress test scenarios to assess the potential impact on liquidity in line with recent guidance.

On 8 February and 12 March 2021 the Company issued bonds for consideration totalling \$476,000 with a three-year maturity term, bearing interest of 7.0%, payable twice-yearly.

The Company signed an investment agreement with Vision Blue Resources and their co-investors on 15 March 2021. In pursuit of this agreement, on 19 March 2021, the Company issued 24,741,021 ordinary shares for cash at a price of 9 pence per share to raise \$3.1m to finance the

further expansion of the existing process plant and completion of the bankable feasibility study. The Initial Investment by Vision Blue has been completed by June 2021. A further investment of \$7m is anticipated to be received imminently with discussions at an advanced stage with Vision Blue for \$4.2m to be received as a nil coupon convertible loan note and \$2.8m to be received through an equity subscription. Additionally, a further \$2.5m will be invested at Vision Blue's option two months after the feasibility study for the development of Phase 1 of the Balasausqandiq project is released – expected around the end of this year. These funds will be sufficient to bring the existing processing factory to the level of 1500 tonnes of V<sub>2</sub>O<sub>5</sub> production per year, generating forecast cash flow of up to \$10m per year. In addition, the investments will be used for finalising the Western Bankable Feasibility Study.

Although the remaining funds to be invested remains at the option of Vision Blue Resources and therefore cannot be guaranteed, in view of the current share price which is substantially in excess of the agreed exercise price and advanced discussions with Vision Blue, the Directors are confident that the \$7m funding will be received imminently and the further \$2.5m investment will be made.

The agreement also provides for further investments at higher share prices to be made at the option of Vision Blue Resources to finance the construction of the Phase 1 project, but these further options are likely to come beyond the time under consideration for current Going Concern purposes.

For the purpose of making an assessment of going concern, the cash flow forecasts reviewed by the Board exclude funding which is not contractually committed and also exclude discretionary expenditure in relation to the capital developments and associated production enhancements. The Group's forecasts indicate that at current vanadium pentoxide and molybdc oxide prices and the planned production levels that the Group will generate sufficient cash flows to meet operational costs and maintain liquidity. Whilst the Group plans to continue its expansion of the existing processing facilities the required capital expenditure, which is discretionary or can be deferred without significant penalty, will require the additional funding above.

Notwithstanding that the current cash position and forecast operational cash flow in the base case and the relatively low number of COVID-19 cases and fatalities to date in Kazakhstan compared to other countries, the further potential impact on the Group of the pandemic remains inherently uncertain. There is further potential for volatility in commodity prices, supply chain disruption, mine site workforce rotations and travel to the mine site if the pandemic escalates. Stress test scenarios indicate that in the event of a sustained further period of restrictions impacting production levels or a significant reduction in vanadium pentoxide price additional funding would be required. In case of a reduction in vanadium pentoxide prices from \$7.5/lb to 5.55/lb and molybdc oxide prices from \$11.97/lb to \$8.86/lb additional funding would be required in December 2021.

After review of these forecasts and scenarios the Directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future based on the recent funds raised and operational cash flow generation of the processing operations at forecast prices. The Directors anticipate completion of the anticipated \$7m funding from Vision Blue shortly which would, having considered the forecasts and COVID-19 stress case scenarios above, provide adequate headroom. Accordingly, the Directors continue to adopt the going concern basis in preparing the consolidated financial statements.

However, at the date of approval of these financial statements, until such time as the anticipated \$7m funding is received, the potential future impact of COVID-19 and the resulting requirement for funding should such possible adverse scenarios materialise indicate the existence of a material uncertainty which may cast significant doubt about the Group's ability to continue as a going concern and therefore it may be unable to realise its assets and discharge its liabilities in the normal course of business. The financial statements do not include the adjustments that would result if the Group was unable to continue as a going concern.

## 2 Use of estimates and judgements

Preparing the financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

### *Carrying value of processing operations*

Given the remaining low in vanadium pentoxide prices in the period, the Directors have tested the processing operations PP&E for impairment (note 12) at 31 December 2020. In doing so, net present value cash flow forecasts were prepared using the fair value less cost to develop method which required key estimates including vanadium pentoxide and molybdc oxide prices, production including the impact of ongoing and planned expansion together with costs and discount rate. Key estimates included:

- Production volumes of 48 tonnes per month of vanadium pentoxide from pyrometallurgical line and 86 tonnes per month of vanadium pentoxide from electrometallurgical line from 2022 with flat production thereafter.
- Average prices of vanadium pentoxide of US\$7.5/lb and molybdc oxide of US\$11.97/lb in 2021 and thereafter, reflecting management estimates having consideration of market commentary less a discount, and used by the Company as a long-term assumption for other planning purposes.
- Further capital development costs of US\$7.6m.
- Discount rate of 10% post tax in real terms.

Based on the key assumptions set out above, the recoverable amount of PP&E (\$48m) exceeds its carrying amount (\$2.8m) by \$45m and therefore PP&E were not impaired.

### Sensitivity analysis

Any impairment is dependent on judgement used in determining the most appropriate basis for the assumptions and estimates made by management, particularly in relation to the key assumptions described above. Sensitivity analysis to potential changes in key assumptions has therefore been provided below.

The impact on the impairment calculation of applying different assumptions to vanadium pentoxide prices, production volumes, future capital expenditure and post-tax discount rates, all other inputs remaining equal, would be as follows:

		Increase/(decrease) in headroom \$'000
Impact if vanadium pentoxide prices:	increased by 30%	30,143
	reduced by 30%	(30,143)
Impact if production volumes:	increased by 10%	10,006
	decreased by 10%	(10,006)
Impact if future capital expenditure:	increased by 20%	(4,661)
	reduced by 20%	4,661
Impact if post-tax discount rate:	increased by 2 percentage points	(7,371)
	decreased by 2 percentage points	9,264

*Fair value of trade receivables and payables classified at fair value through profit and loss (note 24)*

The consideration receivable in respect of certain sales for which performance obligations have been satisfied at year end and for which the Group has received prepayment under the terms of the sale agreements, remain subject to pricing adjustments with reference to market prices in the month of arrival at the port of final destination for AMV and month of shipment from the port for calcium molybdate. Under the Group's accounting policies, the fair value of the consideration is determined and the remaining receivable is adjusted to reflect fair value, or, if the final estimated consideration is lower than the amounts received prior to the year end, a payable at FVTPL is recorded. In the absence of forward market prices for the commodity, management estimated the forward price based on: a) spot market prices for vanadium pentoxide and molybdic oxide at 31 December 2020 less applicable deductions for AMV or calcium molybdate; b) foreign exchange rates; c) risk free rates and d) carry costs when material.

As at 31 December 2020 the Group recognised a payable at FVTPL of US\$0.06m (2019: payable at FVTPL US\$0.059m).

*Inventories (note 16)*

The Group holds material inventories which are assessed for impairment at each reporting date. The assessment of net realisable value requires consideration of future cost to process and sell and spot market prices at year end less applicable discounts. The estimates are based on market data and historical trends.

*Exploration and evaluation assets (note 13)*

The Group holds material exploration and evaluation assets and judgment is applied in determining whether impairment indicators exist under the Group's accounting policy. In determining that no impairment indicator exists management have considered the Competent Person's Report on the asset, the strategic plans for exploration and future development and the status of the licence. Judgment was required in determining that the application for deferral of obligations under the licence (note 26) will be granted and management anticipate such approvals being provided given the impact of Covid-19, their understanding of the Kazakh market and plans for the asset.

### **3 Significant accounting policies**

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements and have been applied consistently by Group entities, except for the implementation of new standards and interpretations.

#### **(a) Basis of consolidation**

##### **(i) Subsidiaries**

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Group.

##### **(ii) Transactions eliminated on consolidation**

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

#### **(b) Foreign currency**

##### **(i) Foreign currency transactions**

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies at the reporting date are translated to the functional currency at the exchange rate at that date.

Non-monetary items in a foreign currency that are measured based on historical cost are translated using the exchange rate at the date of the transaction.

Foreign currency differences arising in translation are recognised in profit or loss.

##### **(ii) Presentation currency**

The assets and liabilities of foreign operations are translated to US\$ at the exchange rates at the reporting date. The income and expenses of foreign operations are translated to US\$ at the average exchange rate for the period, which approximates the exchange rates at the dates of the transactions. Where specific material transactions occur, such as impairments or reversals of impairments, the daily exchange rate is applied when the impact is material.

Foreign currency differences are recognised in other comprehensive income and are presented within the foreign currency translation reserve in equity.

Foreign currency differences arising on intercompany loans, where the loans are not planned to be repaid within the foreseeable future and form part of a net investment, are recorded within other comprehensive income and are presented within the foreign currency translation reserve in equity.

#### **(c) Financial instruments**

Financial assets and financial liabilities are recognised in the Group's consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

##### *Financial assets*

Financial assets are classified as either financial assets at amortised cost, at fair value through other comprehensive income ("FVTOCI") or at fair value through profit or loss ("FVPL") depending

upon the business model for managing the financial assets and the nature of the contractual cash flow characteristics of the financial asset.

A loss allowance for expected credit losses is determined for all financial assets, other than those at FVPL, at the end of each reporting period. The Group applies a simplified approach to measure the credit loss allowance for trade receivables using the lifetime expected credit loss provision. The lifetime expected credit loss is evaluated for each trade receivable taking into account payment history, payments made subsequent to year end and prior to reporting, past default experience and the impact of any other relevant and current observable data. The Group applies a general approach on all other receivables classified as financial assets. The general approach recognises lifetime expected credit losses when there has been a significant increase in credit risk since initial recognition.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party. The Group derecognises financial liabilities when the Group's obligations are discharged, cancelled or have expired.

#### *Customer contracts*

Under its customer sale arrangements, the Group receives a provisional payment upon satisfaction of its performance obligations based on the spot price at that date, which occurs prior to the final price determination, with the Group then subsequently receiving or paying the difference between the final price and quantity and the provisional payment. As a result of the pricing structure, the instrument is classified at FVPL and measured at fair value with changes in fair value recorded as other revenue.

#### *Other receivables*

Other receivables are accounted for at amortised cost. Other receivables do not carry any interest and are stated at their nominal value as reduced by appropriate expected credit loss allowances for estimated recoverable amounts as the interest that would be recognised from discounting future cash payments over the short payment period is not considered to be material.

#### *Cash and cash equivalents*

Cash and cash equivalents comprise cash balances in banks, call deposits and highly liquid investments with maturities of three months or less from the acquisition date that are subject to insignificant risk of changes in their fair value and petty cash.

#### *Financial liabilities*

The Group has the following non-derivative financial liabilities: borrowings and trade and other payables. Such financial liabilities are recognised initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition these financial liabilities are measured at amortised cost using the effective interest method.

#### *Long-term borrowings*

After initial recognition, interest-bearing borrowings are subsequently measured at amortised cost using the effective interest rate method. Gains and losses are recognised in profit or loss. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate. The effective interest rate amortisation is included as finance costs in the statement of profit or loss.

### **(iii) Share capital**

#### *Ordinary shares*

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of ordinary shares are recognised as a deduction from equity, net of any tax effects.

**(d) Property, plant and equipment**

**(i) Recognition and measurement**

Items of property, plant and equipment are measured at cost less accumulated depreciation and impairment losses. Land is measured at cost.

Cost includes expenditure that is directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the asset to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located.

When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

The gain or loss on disposal of an item of property, plant and equipment is determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment, and is recognised net within other income/other expenses in profit or loss.

**(ii) Subsequent costs**

The cost of replacing part of an item of property, plant and equipment is recognised in the carrying amount of the item if it is probable that the future economic benefits embodied within the part will flow to the Group and its cost can be measured reliably. The carrying amount of the replaced part is derecognised. The costs of the day-to-day servicing of property, plant and equipment are recognised in profit or loss as incurred.

**(iii) Depreciation**

Depreciation is based on the cost of an asset less its residual value. Significant components of individual assets are assessed and if a component has a useful life that is different from the remainder of that asset, that component is depreciated separately.

Depreciation is recognised in profit or loss on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Group will obtain ownership by the end of the lease term. Land is not depreciated.

The estimated useful lives for the current and prior periods are as follows:

- Buildings 10-50 years;
- Plant and equipment 4-20 years;
- Vehicles 4-7 years;
- Computers 3-6 years;
- Other 3-10 years.

Depreciation methods, useful lives and residual values are reviewed at each financial year end and adjusted prospectively if appropriate.

Assets under construction are not depreciated and begin being depreciated once they are ready and available for use in the manner intended by management.

**(e) Exploration and evaluation assets**

Exploration and evaluation expenditure for each area of interest once the legal right to explore has been acquired, other than that acquired through a purchase transaction, is carried forward as an asset provided that one of the following conditions is met.

- Such costs are expected to be recouped through successful exploration and development of the area of interest or, alternatively, by its sale;

- Exploration and evaluation activities in the area of interest have not yet reached a stage which permits a reasonable assessment of the existence or otherwise of economically recoverable reserves, and active and significant operations in relation to the area are continuing.

Exploration and evaluation costs are capitalised as incurred. Exploration and evaluation assets are classified as tangible or intangible based on their nature. Exploration expenditure which fails to meet at least one of the conditions outlined above is written off. Administrative and general expenses relating to exploration and evaluation activities are expensed as incurred.

The exploration and evaluation assets shall no longer be classified as such when the technical feasibility and commercial viability of extracting a mineral resource are demonstrable. This includes consideration of a variety of factors such as whether the requisite permits have been awarded, whether funding required for development is sufficiently certain of being secured, whether an appropriate mining method and mine development plan is established and the results of exploration data including internal and external assessments.

Exploration and evaluation assets will be reclassified either as tangible or intangible development assets and amortised on a unit-of-production method based on proved reserves.

Exploration and evaluation assets are assessed for impairment when facts and circumstances suggests that the carrying amount of exploration and evaluation assets may exceed its recoverable amount, which is the case when: the period of exploration license has expired and it is not expected to be renewed; substantial expenditures on further exploration are not planned; exploration has not led to the discovery of commercial viable reserves; or indications exist that exploration and evaluation assets will not be recovered in full from successful development or by sale.

Impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount.

**(f) Intangible assets**

**(i) Intangible assets with finite useful lives**

Intangible assets that are acquired by the Group, which have finite useful lives, are measured at cost less accumulated amortisation and accumulated impairment losses.

**(ii) Subsequent expenditure**

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in profit or loss as incurred.

**(iii) Amortisation**

Amortisation is calculated over the cost of the asset, or other amount substituted for cost, less its residual value.

Amortisation is recognised in profit or loss on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use since this most closely reflects the expected pattern of consumption of future economic benefits embodied in the asset.

The estimated useful lives for the current and comparative periods are as follows:

- patents 10-20 years;
- mineral rights 20 years.

Amortisation methods, useful lives and residual values are reviewed at each financial year end and adjusted if appropriate.

**(g) Leased assets**

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments: fixed payments (including

in-substance fixed payments), less any lease incentives receivable and variable payments based on index or rate amounts expected to be payable by the Group under residual value guarantees payments of penalties for terminating the lease, if the lease term reflects the Group exercising that option. Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability. The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for leases in the Group, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

## (h) Inventories

Inventories are measured at the lower of cost and net realisable value. The cost of inventories is based on first-in first-out method, and includes expenditure incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

## (i) Impairment

### (i) *Non-financial assets*

The carrying amounts of the Group's non-financial assets, other than inventories and deferred tax assets are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. An impairment loss is recognised if the carrying amount of an asset or its related cash-generating unit (CGU) exceeds its estimated recoverable amount.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell (otherwise referred to as fair value less cost to develop in the industry). Fair value less costs to sell is determined by discounting the post-tax cash flows expected to be generated by the cash-generating unit, net of associated selling costs, and takes into account assumptions market participants would use in estimating fair value including future capital expenditure and development cost. In assessing the value in use, the estimated future cash flows are adjusted for the risks specific to the asset/cash-generating unit and are discounted to their present value that reflects the current market indicators. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGU.

The Group's corporate assets do not generate separate cash inflows. If there is an indication that a corporate asset may be impaired, then the recoverable amount is determined for the cash generating unit to which the corporate asset belongs.

An impairment loss is recognised if the carrying amount of an asset or its cash-generating unit exceeds its recoverable amount. Impairment losses are recognised in profit or loss.

Impairment losses recognised in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

**(j) Employee benefits****(i) Defined contribution plans**

The Group does not incur any expenses in relation to provision of pensions or other post-employment benefits to its employees. In accordance with State pension social insurance regulations, the Group withholds pension contributions from employee salaries and transfers them into state pension funds. Once the contributions have been paid, the Group has no further pension obligations. Upon retirement of employees, all pension payments are administrated by the pension funds directly.

**(ii) Short-term benefits**

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under short-term cash bonus or profit-sharing plans if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

**(iii) Share-based payments**

The grant-date fair value of equity-settled share-based payment arrangements granted to employees is generally recognised as an expense, with a corresponding increase in equity, over the vesting period of the awards. The amount recognised as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognised is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant-date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

**(k) Provisions**

A provision is recognised if, as a result of a past event, the Group has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognised as a finance cost.

**Site restoration**

In accordance with the Group's environmental policy and applicable legal requirements, a provision for site restoration is recognised when the land is disturbed as a result of pit development and plant decommissioning with a corresponding increase in exploration and evaluation costs or property, plant and equipment. Subsequent changes in the provision due to estimates are recorded as a change in the relevant asset. The provision is discounted at a risk-free rate with the costs incorporating risks relevant to the site restoration and an unwinding charge is recognised within finance cost for the unwinding of the discount.

**(l) Revenue****(i) Goods sold**

Revenue from customers comprises the sale of vanadium and molybdenum products with other revenues from gravel and waste rock etc. being non-significant. Revenue from vanadium products is recognised at a point in time when the customer has a legally binding obligation to settle under the terms of the contract when the performance obligations have been satisfied, which is once control of the goods has transferred to the buyer at a designated delivery point at which point possession, title and risk transfers.

The Group commonly receives a provisional payment at the date control passes with reference to spot prices at that date. The final consideration is subject to quantity / quality adjustments and final pricing based on market prices determined after the product reaches its port of destination. The quantity / quality adjustments represent a form of variable consideration and revenue is constrained to record amounts for which it is highly probable no reversal will be required. However, given the short period to delivery post year end the final quantity / quality adjustments are known and revenue for the period is adjusted to reflect the final quantity / quality occurring subsequent to year end if material.

Changes in final consideration due to market prices is not determined to qualify as variable consideration within the scope of the IFRS 15 “Revenue from Customers”. Changes in fair value as a result of market prices are recorded within revenue as other revenue.

**(m) Finance costs**

Finance costs comprise interest expense on borrowings, unwinding of the discount on provisions for historical costs and site restoration, foreign currency losses. Borrowing costs that are not directly attributable to the acquisition, construction or production of a qualifying asset are recognised in profit or loss using the effective interest method.

Foreign currency gains and losses are reported on a net basis as either finance income or finance cost depending on whether foreign currency movements result in a net gain or loss, this includes exchange gains and losses that arise on trade and other receivables and trade and other payables in foreign currency.

**(o) Income tax**

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognised in profit or loss except to the extent that they relate to items recognised directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognised for temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss. Deferred tax is measured at the tax rates that are expected to be applied to the temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date.

Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax assets and liabilities, and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realised simultaneously.

A deferred tax asset is recognised for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilised. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised.

**(p) Earnings per share**

The Group presents basic and diluted earnings per share (“EPS”) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares.

**(q) Segment reporting**

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses (including revenues and expenses related to transactions with other components of the same Group); whose operating results are regularly reviewed by the chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance, and for which discrete financial information is available.

**(r) New and amended standards adopted**

None of the amendments that are effective as of 1 January 2020 had significant impact on the Group's consolidated financial statements. The Group has not early adopted any standard, interpretation or amendment that has been issued but is not yet effective as at 1 January 2020.

Several amendments and interpretations apply for the first time in 2020, but do not have an impact on the Group's consolidated financial statements.

*Amendments to IAS 1 and IAS 8: Definition of material*

The amendments provides a new definition of material that states "information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting equity. "

The amendments clarify that materiality will depend on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. These amendments had no impact on these consolidated financial statements and nor is there expected to be any future impact to the Group.

*Amendments to IFRS 3: Definition of a business*

The amendment to IFRS 3 clarifies that to be considered a business, an integrated set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create output. Furthermore, it clarified that a business can exist without including all of the inputs and processes needed to create outputs. These amendments had no impact on these consolidated financial statements of the Group but may impact future periods if the Group enter into any business combinations.

*Amendments to IFRS 7, IFRS 9 and IAS 39: Interest rate benchmark reform*

The amendments to IFRS 9 and IAS 39 Financial instruments: Recognition and Measurement provide a number of reliefs, which apply to all hedging relationships that are directly affected by interest rate benchmark reform. A hedging relationship is affected if the reform gives rise to uncertainties to about the timing and or amount of benchmark-based cash flows of the hedged item or the hedging instrument. These amendments had no impact on these consolidated financial statements of the Group as it does not have any interest rate hedge relationships.

*Amendments effective in 2021**Amendment to IFRS 16 Lease: COVID-19 related rent concessions*

This amendment will provide relief to lessees from applying from IFRS 16 guidance on lease modifications to rent concessions arising as a direct consequence of COVID-19 pandemic. These amendment had no impact on these consolidated financial statements of the Group as there is no COVID-19 related rent concessions held by the Group.

*Conceptual framework for financial reporting*

The purpose of the conceptual framework is to assist IASB in developing standards, to help prepares developing consistent accounting policies where there is no applicable standard in place and to assist all parties to understand and interpret standards.

The revised conceptual framework includes some new concepts, provide updated definitions and recognition criteria for assets and liabilities and clarifies some important concepts.

Amendments effective in 2022

*Amendments to IAS 37 Provisions contingent liabilities and contingent assets*

These amendments specify the a company includes when assessing whether a contract will be loss-making and therefore recognized as an onerous contract. These amendments are expected to result in more contracts being accounted for as onerous contracts because they increase the scope of costs that are included in the onerous contract assessment.

*Amendments to IAS 16 Property, plant and equipment*

These amendments prohibit a company from deducting amounts received from selling items produced while the company is preparing the asset for its intended use from the cost of property, plant and equipment. Instead, a company will recognize such sales proceeds and any related costs in profit and loss.

## 4 Revenue

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Revenue from sales of vanadium products	2,197	2,376
Revenue from sales of molybdate calcium	68	-
Sales of gravel and waste rock	8	15
Service revenue	27	-
<b>Total revenue from customers under IFRS 15</b>	<b>2,300</b>	<b>2,391</b>
Other revenue - change in fair value of customer contract	73	(550)
<b>Total revenue</b>	<b>2,373</b>	<b>1,841</b>

### *Vanadium and molybdenum products*

Under certain sales contracts the single performance obligation is the delivery of AMV or calcium molybdate to the designated delivery point at which point possession, title and risk on the product transfers to the buyer. The buyer makes an initial provisional payment based on volumes and quantities assessed by the Company and market spot prices of vanadium pentoxide for AMV and molybdic oxide for calcium molybdate at the date of shipment. The final payment is received once the product has reached its final destination with adjustments for quality / quantity and pricing. The final pricing is based on the historical average market prices during a quotation period based on the date the product reaches the port of destination for AMV and the month of shipment from the port for calcium molybdate and an adjusting payment or receipt will be made to the initially received revenue. Where the final payment for a shipment made prior to the end of an accounting period has not been determined before the end of that period, the revenue is recognised based on the spot price that prevails at the end of the accounting period.

Other revenue related to the change in the fair value of amounts receivable and payable under the sales contracts between the date of initial recognition and the period end resulting from market prices are recorded as other revenue. Refer to note 17 and 24 for details of trade receivables and payables at FVTPL recorded in 2020 and 2019.

The Company has started production and sales of calcium molybdate in the end of 2020. The amount is not yet significant but the product is demanded by the market.

## 5 Cost of sales

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Materials	2,523	1,674
Wages, salaries and related taxes	435	541
Depreciation	405	400
Write-down of inventories to net realisable value	-	172
Electricity	145	133
Professional service	117	134
Transportation cost	97	37
Taxes other than income	31	15
Raw materials obsolescence provision	-	36
Other	26	36
	<b>3,779</b>	<b>3,178</b>

## 6 Other income

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Other	8	70
	<b>8</b>	<b>70</b>

## 7 Administrative expenses

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Wages, salaries and related taxes	909	959
Professional services	312	159
Loss on write-off of VAT non-refundable	301	-
Expenses on credit loss provision	15	-
Taxes other than income tax	114	12
Listing & reorganisation expenses	103	273
Audit	152	144
Materials	57	82
Rent	55	12
Depreciation and amortization	26	28
Insurance	21	16
Bank fees	16	18
Business trip expenses	19	83
Write-off of bad debts	15	-
Security	14	15
Research	14	11
Communication and information services	9	8
Write-off of prepayments	7	-
Other	74	21
	<b>2,233</b>	<b>1,841</b>

During 2020 the group's main operating company in Kazakhstan was audited by the tax authorities for the purpose of to receiving reimbursement of excess VAT for the period from 2015 to 31 March 2020. Following the completion of the audit a repayment of 116,000,000 KZT (approximately US\$276,000) was received. VAT of \$301,000 was written off as non-refundable. During 2020 VAT receivables increased by \$230,000, mainly due to VAT on import and \$101,000 reduced our VAT receivable as a decision by Tax authorities, resulting to the ending balance of \$205,000. In 2021 the Company applied for the refund of this amount. It is expected that VAT receivable will be reimbursed on a quarterly basis.

## 8 Other expenses

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Other	-	9
	<b>-</b>	<b>9</b>

## 9 Personnel costs

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Wages, salaries and related taxes	1,286	1,505
	<b>1,286</b>	<b>1,505</b>

During 2020 personnel costs of US\$ 351 thousand (2019: US\$ 596 thousand) have been charged to cost of sales, US\$ 909 thousand (2019: US\$ 959 thousand) to administrative expenses and US\$ 26 thousand (2019: US\$ 84 thousand) were charged to cost of inventories which were not yet sold as at the year-end.

## 10 Finance costs

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Net foreign exchange costs	98	179
Unwinding of discount on site restoration provision	4	4
Interest expense on financial liabilities (bonds)	31	-
<b>Net finance costs</b>	<b>133</b>	<b>183</b>

## 11 Income tax

The Group's applicable tax rates in 2020 are the income tax rate of 20% for Kazakhstan subsidiaries (2019: 20%) and 0% (2019: 0%) for Guernsey and BVI companies. The Kazakh tax rate has been applied below as this is most reflective of the Group's trading operations and tax profile.

During the years ended 31 December 2020 and 2019 the Group incurred tax losses and therefore did not recognise any current income tax expense except in relation the provision of Group services where an income tax charge of US\$2,000 was incurred in 2020. Unrecognised deferred tax assets are described in Note 15.

### Reconciliation of effective tax rate:

	<b>2020</b>		<b>2019</b>	
	<b>\$000</b>	<b>%</b>	<b>\$000</b>	<b>%</b>
<b>Loss before tax (Group)</b>	<b>(3,942)</b>	<b>100</b>	<b>(3,342)</b>	<b>100</b>
Income tax at the applicable tax rate	(788)	20	(669)	20
Effect of unrecognised deferred tax assets / (utilisation of previously unrecognised losses)	502	(13)	295	(9)
Net non-deductible expenses/non-taxable income or loss	284	(7)	374	(11)
	<b>(2)</b>	<b>-</b>	<b>-</b>	<b>-</b>

## 12 Property, plant and equipment

	Land and buildings \$000	Plant and equipment \$000	Vehicles \$000	Computers \$000	Other \$000	Construction in progress \$000	Total \$000
<i>Cost</i>							
Balance at 1 January 2019	1,611	1,836	426	23	75	474	4,445
Additions	2	183	157	15	28	1,053	1,438
Transfers	62	28	-	-	-	(90)	-
Disposals	-	(48)	-	-	-	-	(48)
Foreign currency translation difference	12	15	4	1	1	8	41
<b>Balance at 31 December 2019</b>	<b>1,687</b>	<b>2,014</b>	<b>587</b>	<b>39</b>	<b>104</b>	<b>1,445</b>	<b>5,876</b>
Balance at 1 January 2020	1,687	2,014	587	39	104	1,445	5,876
Additions	-	28	10	1	5	255	299
Foreign currency translation difference	(158)	(189)	(56)	(4)	(10)	(140)	(557)
<b>Balance at 31 December 2020</b>	<b>1,529</b>	<b>1,853</b>	<b>541</b>	<b>36</b>	<b>99</b>	<b>1,560</b>	<b>5,618</b>
<i>Depreciation</i>							
Balance at 1 January 2019	581	1,335	282	12	32	-	2,242
Depreciation for the period	53	312	46	6	9	-	426
Disposals	-	(14)	-	(1)	(2)	-	(17)
Foreign currency translation difference	5	12	2	-	-	-	19
<b>Balance at 31 December 2019</b>	<b>639</b>	<b>1,645</b>	<b>330</b>	<b>17</b>	<b>39</b>	<b>-</b>	<b>2,670</b>
Balance at 1 January 2020	639	1,645	330	17	39	-	2,670
Depreciation for the period	51	294	42	7	12	-	406
Foreign currency translation difference	(61)	(160)	(32)	(2)	(3)	-	(258)
<b>Balance at 31 December 2020</b>	<b>629</b>	<b>1,779</b>	<b>340</b>	<b>22</b>	<b>48</b>	<b>-</b>	<b>2,818</b>
<i>Carrying amounts</i>							
<b>At 1 January 2019</b>	<b>1,030</b>	<b>501</b>	<b>144</b>	<b>11</b>	<b>43</b>	<b>474</b>	<b>2,203</b>
<b>At 31 December 2019</b>	<b>1,048</b>	<b>369</b>	<b>257</b>	<b>22</b>	<b>65</b>	<b>1,445</b>	<b>3,206</b>
<b>At 31 December 2020</b>	<b>900</b>	<b>74</b>	<b>201</b>	<b>14</b>	<b>51</b>	<b>1,560</b>	<b>2,800</b>

During 2020 depreciation expense of US\$380 thousand (2019: US\$394 thousand) has been charged to cost of sales, excluding cost of finished goods that were not sold at year-end, US\$25 thousand (2019: US\$ 26 thousand) – to administrative expenses, and US\$1 thousand has been charged to cost of finished goods that were not sold at the year-end (2019: US\$25 thousand). Construction in progress relates to upgrades to the processing plant associated with the expansion of the facility.

The Company is planning to procure an electric arc furnace which will be used in production of ferro-vanadium and ferro-nickel. This furnace has been designed, contracts agreed and will take some six months to build once the order is placed.

### 13 Exploration and evaluation assets

The Group's exploration and evaluation assets relate to Balasausqandiq deposit. During the year ended 31 December 2020 the Group capitalised the expenses on services of Coffey Geotechnics Ltd regarding development of a feasibility study as exploration and evaluation assets (in 2019: US\$Nil). As at 31 December 2020 the carrying value of exploration and evaluation assets was US\$0.8m (2019: US\$0.059m).

	2020 \$000	2019 \$000
Balance at 1 January	59	59
Additions (feasibility study)	770	-
Change in estimate (asset restoration obligation)	(14)	-
Foreign currency translation difference	(2)	-
<b>Balance at 31 December</b>	<b>813</b>	<b>59</b>

### 14 Intangible assets

	Mineral rights \$000	Patents \$000	Computer software \$000	Total \$000
<b>Cost</b>				
Balance at 1 January 2019	99	33	3	135
Additions	-	1	-	1
Foreign currency translation difference	1	-	-	1
<b>Balance at 31 December 2019</b>	<b>100</b>	<b>34</b>	<b>3</b>	<b>137</b>
Balance at 1 January 2020	100	34	3	137
Additions	-	1	-	1
Foreign currency translation difference	(9)	(3)	-	(12)
<b>Balance at 31 December 2020</b>	<b>91</b>	<b>32</b>	<b>3</b>	<b>126</b>
<b>Amortisation</b>				
Balance at 1 January 2019	99	9	2	110
Amortisation for the year	-	2	-	2
Foreign currency translation difference	1	(1)	1	1
<b>Balance at 31 December 2019</b>	<b>100</b>	<b>10</b>	<b>3</b>	<b>113</b>
Balance at 1 January 2020	100	10	3	113
Amortisation for the year	-	1	-	1
Foreign currency translation difference	(9)	-	-	(9)
<b>Balance at 31 December 2020</b>	<b>91</b>	<b>11</b>	<b>3</b>	<b>105</b>
<b>Carrying amounts</b>				
At 1 January 2019	-	25	-	25
<b>At 31 December 2019</b>	<b>-</b>	<b>24</b>	<b>-</b>	<b>24</b>
<b>At 31 December 2020</b>	<b>-</b>	<b>21</b>	<b>-</b>	<b>21</b>

During 2020 and 2019 amortisation of intangible assets was charged to administrative expenses.

## 15 Deferred tax assets and liabilities

### Unrecognised deferred tax assets

	<b>31 December 2020 \$000</b>	<b>31 December 2019 \$000</b>
Temporary deductible differences	320	229
Tax losses carried forward	10,511	3,256
Unrecognized tax deferred tax assets	(10,831)	(3,485)
	<u>-</u>	<u>-</u>

Deferred tax assets have not been recognised in respect of these items given the taxable loss in the year and because the Kazakhstan processing operations benefit from a tax incentive agreement which reduces the tax payable to nil and it is therefore uncertain that future taxable profit will be available against which the Group can utilise the benefits therefrom. The tax incentive agreement is effective for ten years starting from 2018.

The increase in carried forward tax losses comprises the tax loss for the period and the effect of resubmissions of previous tax filings which contributed to an increase in tax losses.

Temporary deductible differences mostly relate to property, plant and equipment. Unutilised tax losses expire after 10 years from the year of origination.

Expiry dates of unrecognised deferred tax assets in respect of tax losses carried forward at 31 December 2020 are presented below:

<u>Expiry year</u>	<u>\$000</u>
2021	339
2022	322
2023	1,020
2024	521
2025	251
2026	881
2027	528
2028	566
2029	2,362
2030	3,721
	<u><b>10,511</b></u>

Unrecognised deferred tax assets above are calculated based on Kazakh tax rate of 20%.

## 16 Inventories

	<b>31 December 2020 \$000</b>	<b>31 December 2019 \$000</b>
Raw materials and consumables	434	1,575
Finished goods	75	172
Work in progress	185	-
Goods in transit	-	3
	<u><b>694</b></u>	<u><b>1,750</b></u>

During 2020 inventories expensed to profit and loss amounted to \$2,580 thousand (2019: \$1,756 thousand)

## 17 Trade and other receivables

<i>Non-current</i>	<b>31 December 2020</b>	<b>31 December 2019</b>
	<b>\$000</b>	<b>\$000</b>
VAT receivable	-	1,012
Provision for VAT receivable	-	(360)
	<b>-</b>	<b>652</b>
<i>Current</i>	<b>31 December 2020</b>	<b>31 December 2019</b>
	<b>\$000</b>	<b>\$000</b>
Trade receivables from third parties	18	30
Due from employees	10	17
VAT receivable	205	-
Other receivables	8	9
	<b>241</b>	<b>56</b>
Expected credit loss provision for receivables	(36)	(21)
	<b>205</b>	<b>35</b>

The expected credit loss provision for receivables relates to credit impaired receivables which are in default and the Group considers the probability of collection to be remote given the age of the receivable and default status.

During 2020 the group's main operating company in Kazakhstan was audited by the tax authorities for the purpose of to receiving reimbursement of excess VAT for the period from 2015 to 31 March 2020. Following the completion of the audit a repayment of 116,000,000 KZT (approximately US\$276,000) was received. VAT of \$301,000 was written off as non-refundable. During 2020 VAT receivables increased by \$230,000, mainly due to VAT on import and \$101,000 reduced our VAT receivable as a decision by Tax authorities, resulting to the ending balance of \$205,000. In 2021 the Company applied for the refund of this amount. It is expected that VAT receivable will be reimbursed on a quarterly basis.

## 18 Prepayments

	<b>31 December 2020</b>	<b>31 December 2019</b>
	<b>\$000</b>	<b>\$000</b>
<i>Non-current</i>		
Prepayments for equipment	1,467	1,148
	<b>1,467</b>	<b>1,148</b>
<i>Current</i>		
Prepayments for goods and services	52	38
	<b>52</b>	<b>38</b>

The prepayments for equipment is related mainly to high-voltage powerline connection. For more details see Report on production.

## 19 Cash and cash equivalents

	<b>31 December 2020</b>	<b>31 December 2019</b>
	<b>\$000</b>	<b>\$000</b>
Cash at current bank accounts	688	647
Cash at bank deposits	14	-
Petty cash	5	1
<b>Cash and cash equivalents</b>	<b>707</b>	<b>648</b>

## 20 Equity

### (a) Share capital

*Number of shares unless otherwise stated*

	<b>Ordinary shares</b>	
	<b>31 December 2020</b>	<b>31 December 2019</b>
Par value	-	-
Outstanding at beginning of year	312,978,848	305,471,087
Shares issued	17,610,204	7,507,761
<b>Outstanding at end of year</b>	<b>330,589,052</b>	<b>312,978,848</b>

### Ordinary shares

All shares rank equally. The holders of ordinary shares are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company.

On 6 January 2020 the Company's shares were admitted to listing on the Astana International Stock Exchange (AIX).

From 23 January 2020 the Company's shares were delisted from the Kazakh Stock Exchange (KASE).

During 2020 the Company issued 16,846,154 ordinary shares of no par value by way of a direct subscription into the Company for cash at prices from 6.5 to 10 pence per share, raising a total of £1,300,000.

In June 2020 the Company issued 764,050 ordinary shares of no par value at 8 pence per share in lieu of fees in the amount of \$75,000 to pay salary to non-executive directors.

### Reserves

Share capital: Value of shares issued less costs of issuance.

Additional paid in capital: Amounts due to shareholders which were waived.

Foreign currency translation reserve: Foreign currency differences on retranslation of results from functional to presentational currency and foreign exchange movements on intercompany balances considered to represent net investments which are permanent as equity.

Accumulated losses: Cumulative net losses.

**(b) Dividends**

No dividends were declared for the year ended 31 December 2020.

**(c) (Loss) earnings per share (basic and diluted)**

The calculation of basic and diluted (loss) / earnings per share has been based on the following loss attributable to ordinary shareholders and weighted-average number of ordinary shares outstanding. There are no convertible bonds and convertible preferred stock, so basic and diluted losses are equal.

(i) **Loss attributable to ordinary shareholders (basic and diluted)**

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Loss for the year, attributable to owners of the Company	(3,944)	(3,342)
<b>Loss attributable to ordinary shareholders</b>	<b>(3,944)</b>	<b>(3,342)</b>

(ii) **Weighted-average number of ordinary shares (basic and diluted)**

<b>Shares</b>	<b>2020</b>	<b>2019</b>
Issued ordinary shares at 1 January (after subdivision)	312,978,848	305,471,087
Effect of shares issued (weighted)	6,812,878	5,718,240
<b>Weighted-average number of ordinary shares at 31 December</b>	<b>319,791,726</b>	<b>311,189,327</b>
Earnings (loss) per share of common stock attributable to the Company (basic and diluted)	(0.012)	(0.011)

## 21 Loans and borrowings

In 2020 the Company issued unsecured corporate bonds with effective interest rates of 7.5%, 7.0% and 5.8%. Investors have subscribed for a total of 464 of the Company's bonds with a nominal value of US\$2,000 each but are issued at a premium or discount to achieve the effective interest rates agreed. The bonds are unsecured, have a three-year term, and bear the coupon rate of 5.8%, paid twice-yearly. The bonds have been listed on AIX with identifier FAR.0323 and ISIN number KZX000000336. The investors in certain bonds have the right to receive early repayment after a minimum period of 12 months.

	<b>31 December 2020</b>	<b>31 December 2019</b>
	<b>\$000</b>	<b>\$000</b>
<b>Non-current liabilities</b>		
Bonds payable	412	-
	<b>412</b>	<b>-</b>
<b>Current liabilities</b>		
Bonds payable (early repayment rights)	512	-
Interest payable	12	-
	<b>524</b>	<b>-</b>

Terms and conditions of outstanding bonds in 2020 were as follows:

<b>USD</b>	<b>Currency</b>	<b>Effective interest rate</b>	<b>Nominal amount</b>	<b>Actual amount</b>	<b>Coupon rate</b>	<b>Coupon paid</b>	<b>Interest</b>
Bonds payable	USD	7.5%	506	504	5.8%	10	16
Bonds payable	USD	7.0%	402	400	5.8%	9	14
Bonds payable	USD	5.8%	20	20	5.8%	-	1
			<b>928</b>	<b>924</b>		<b>19</b>	<b>31</b>

During 2020 the Group sold bonds to subscribers and received cash from subscribers in the total amount of USD 924,000 (2019: \$nil).

Details of tranches of the bonds

Tranche date	Bond denomination	Actual price per bond	Number of bonds	Nominal amount	Actual amount	Earliest repayment date	Maturity date
05.06.2020	2000	2000	50	100,000	100,000	05.07.2021	17.03.2023
11.06.2020	2000	2000	100	200,000	200,000	17.03.2023	17.03.2023
01.09.2020	2000	2053	5	10,000	10,264	01.10.2021	17.03.2023
09.09.2020	2000	2001	150	300,000	300,114	09.10.2021	17.03.2023
30.09.2020	2000	1951	26	52,000	50,717	17.03.2023	17.03.2023
10.11.2020	2000	1985	51	102,000	101,229	10.12.2021	17.03.2023
23.11.2020	2000	2021	5	10,000	10,105	17.03.2023	17.03.2023
14.12.2020	2000	1958	52	104,000	101,833	17.03.2023	17.03.2023
22.12.2020	2000	1981	25	50,000	49,537	17.03.2023	17.03.2023
<b>Total</b>				<b>928,000</b>	<b>923,799</b>		

Non-cash transactions from financing activities are shown in the reconciliation of liabilities from financing transactions overleaf.

Loans and borrowings	2020 \$000	2019 \$000
<b>At 1 January</b>	-	-
Cash flows:		
-Interest paid	(19)	-
-Proceeds from loans and borrowings	924	-
<b>Total</b>	<b>905</b>	-
Non-cash flows		
- Interest accruing in period	33	-
- Bond discount/premium	(2)	-
<b>At 31 December</b>	<b>936</b>	-

## 22 Provisions

	2020 \$000	2019 \$000
Balance at 1 January	64	60
Unwinding of discount	4	4
Change in estimate	(14)	-
Foreign currency translation difference	(7)	-
<b>Balance at 31 December</b>	<b>47</b>	<b>64</b>
<i>Non-current</i>	47	64
	<b>47</b>	<b>64</b>

### Site restoration

A provision was recognised in respect of the Group's obligation to rectify environmental damage in the Balasausqandiq mine, Kyzylorda region.

In accordance with Kazakhstan environmental legislation, land contaminated by the Group in the Kyzylorda region must be restored before the end of 2043. The provision was estimated by considering the risks related to the amount and timing of restoration costs based on the known level of damage. Because of the long-term nature of the liability, the main uncertainty in estimating the provision is the costs that will be incurred. In particular, the Group has assumed that the site will be

restored using technology and materials that are available currently. A fund to cover this liability will be collected via annual statutory contributions to the special liquidation fund at the rate of 1% of mining expenses as stipulated in the Subsoil contract. Based on the working program which forms the part of the Subsoil contract the total amount is expected to reach KZT 675m or US\$ 1,838,000. The present value of restoration costs was determined by discounting the estimated restoration cost using a Kazakh risk-free rate for the respective period, and inflation of 7.5% (31 December 2019: 5.9%). The estimated period for discounting was 23 years (2019: 24 years). Environmental legislation in Kazakhstan continues to evolve and it is difficult to determine the exact standards required by the current legislation in restoring sites such as this. Generally, the standard of restoration is determined based on discussions with the Government officials at the time that restoration commences.

## 23 Trade and other payables

	31 December 2020	31 December 2019
	\$000	\$000
Trade payables	1,035	256
Debt to directors/key management (Note 29)	522	212
Debt to employees	57	105
Other taxes	122	53
	<u>1,736</u>	<u>626</u>

Majority of trade payables (\$444 thousand) are related to feasibility study to Coffey/Tetrattech Group. The rest of trade payables are related for the raw material contracts that have 30 payment days after delivery.

The balance was paid for feasibility study in March 2021.

## 24 Payables at FVPL

	31 December 2020	31 December 2019
	\$000	\$000
Payables at FVPL	60	59
	<u>60</u>	<u>59</u>

## 25 Financial instruments and risk management

### (a) Overview

The Group has exposure to the following risks from its use of financial instruments:

- credit risk;
- liquidity risk;
- market risk.

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital. Further quantitative disclosures are included throughout these consolidated financial statements.

### Risk management framework

The Chief Executive has overall responsibility for the establishment and oversight of the Group's risk management framework.

The Group's risk management policies are established to identify and analyse the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed to reflect changes in market conditions and the

Group's activities. The Group aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

**(b) Credit risk**

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Group's receivables from customers.

**(i) Exposure to credit risk**

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was:

	Carrying amount	
	31 December 2020 \$000	31 December 2019 \$000
Trade and other receivables, excluding amounts due from employees and VAT receivable	-	18
Cash and cash equivalents	702	647
	<b>702</b>	<b>665</b>

The maximum exposure to credit risk for trade and other receivables at the reporting date by geographic region was:

	Carrying amount	
	31 December 2020 \$000	31 December 2018 \$000
Kazakhstan	-	18
	-	<b>18</b>

The maximum exposure to credit risk for trade and other receivables at the reporting date by type of customer was:

	Carrying amount	
	31 December 2020 \$000	31 December 2019 \$000
<i>Trade receivables:</i>		
Wholesale customers	-	9
<i>Other receivables</i>		
Other	-	9
	-	<b>18</b>

The ageing of trade and other receivables at the reporting date was:

	Gross 2020 \$000	Impairment 2020 \$000	Net 2020 \$000	Gross 2019 \$000	Impairment 2019 \$000	Net 2019 \$000
Not past due	-	-	-	18	-	18
Past due more than 180 days	36	(36)	-	21	(21)	-
	<b>36</b>	<b>(36)</b>	<b>-</b>	<b>39</b>	<b>(21)</b>	<b>18</b>

The movement in the allowance for expected credit losses in respect of other receivables during the year was as follows:

	<b>2020</b>	<b>2019</b>
	<b>\$000</b>	<b>\$000</b>
Balance at beginning of the year	21	21
Expected credit loss change	15	-
<b>Balance at end of the year</b>	<b>36</b>	<b>21</b>

Amounts due from customers at year end have been subsequently collected in 2021, except for credit impaired amounts. No additional expected credit loss provision has been applied.

**(ii) Cash and cash equivalents**

As at 31 December 2020 the Group held cash of US\$ 707 thousand (31 December 2019: US\$ 648 thousand), of which bank balances of US\$ 702 thousand (31 December 2019: US\$ 647 thousand) represent its maximum credit exposure on these assets, which excludes petty cash. 64% (31 December 2019: 96%) is held in banks with credit ratings of A+ to AA-, 36% in banks with credit ratings of B to BB (31 December 2019: 4%). Credit ratings are provided by the rating agency Fitch.

**(c) Liquidity risk**

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The following are the contractual maturities of financial liabilities. It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

**2020**

	<b>Carrying amount \$000</b>	<b>Contractual cash flows \$000</b>	<b>On demand \$000</b>	<b>0-6 mths \$000</b>	<b>6 months - 1 year \$000</b>	<b>1-3 years \$000</b>
<b>Financial liabilities</b>						
Trade and other payables and payables at FVTPL	1,674	1,674	9	1,665	-	-
Loans and borrowings	936	1,015	-	23	540	452
	<b>2,610</b>	<b>2,689</b>	<b>9</b>	<b>1,688</b>	<b>540</b>	<b>452</b>

**2019**

	<b>Carrying amount \$000</b>	<b>Contractual cash flows \$000</b>	<b>On demand \$000</b>	<b>0-6 mths \$000</b>	<b>6 months - 1 year \$000</b>	<b>1-3 years \$000</b>
<b>Financial liabilities</b>						
Trade and other payables and payables at FVTPL	632	632	-	632	-	-
Loans and borrowings	-	-	-	-	-	-
	<b>632</b>	<b>632</b>	<b>-</b>	<b>632</b>	<b>-</b>	<b>-</b>

**(d) Market risk**

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return.

As the basis for the market risk the Company has analyzed the impact of different levels of vanadium pentoxide prices on profitability. The Company is very closely monitoring the market circumstances with leading international organizations in vanadium industry. The sensitivity analysis showed that the price below \$4/lb on vanadium pentoxide is critical for the Company in the current operations.

Current level of vanadium pentoxide prices is sufficient to keep the Company in the stable profitable level.

**(i) Currency risk**

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currency of Group entities.

In respect of monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

### Exposure to currency risk

The Group's exposure to foreign currency risk was as follows based on notional amounts:

	US\$- denominated	GBP- denominated	EUR- denominated	RUB- denominated	KZT- denominated
	2020 \$000	2020 \$000	2020 \$000	2020 \$000	2020 \$000
Cash and cash equivalents	248	198	-	-	260
Trade and other payables	(700)	(497)	(31)	(34)	(412)
Loans and borrowings	(936)	-	-	-	-
<b>Net exposure</b>	<b>(1,388)</b>	<b>(299)</b>	<b>(31)</b>	<b>(34)</b>	<b>(152)</b>

	US\$- denominated	GBP- denominated	EUR- denominated	RUB- denominated	KZT- denominated
	2019 \$000	2019 \$000	2019 \$000	2019 \$000	2019 \$000
Cash and cash equivalents	141	478	-	3	25
Trade and other payables	(316)	(116)	-	(2)	(192)
Loans and borrowings	-	-	-	-	-
<b>Net exposure</b>	<b>(175)</b>	<b>362</b>	<b>-</b>	<b>1</b>	<b>(167)</b>

The following significant exchange rates applied during the year:

in US\$	Average rate		Reporting date spot rate	
	2020	2019	2020	2019
KZT 1	0.0024	0.0026	0.0024	0.0026
GBP 1	1.2827	1.2764	1.3576	1.3117
RUB 1	0.0139	0.0155	0.0134	0.0162
EUR 1	1.1414	0.1195	1.2268	1.1198

### (ii) Interest rate risk

Changes in interest rates do not significantly impact the Group's position as at 31 December 2020. Management does not have a formal policy of determining how much of the Group's exposure should be to fixed or variable rates. However, at the time of raising new loans or borrowings management uses its judgment to decide whether it believes that a fixed or variable rate would be more favourable to the Group over the expected period until maturity.

The bonds interest rates are fixed by agreements.

Changes in interest rates at the reporting date would not significantly affect profit or loss.

### Other risks

IAS 1 requires to disclose the risks and measures to meet these risks related to external requirements to the capital. There are no external requirements to the capital effective at present. Group's external borrowings are bonds which do not require special capital requirements.

**(e) Fair values versus carrying amounts**

Management believes that the fair value of the Group's financial assets and liabilities approximates their carrying amounts.

**Categories of financial instruments**

	2020 \$'000	2019 \$'000
<b>Financial assets (includes cash)</b>		
Trade and other receivables at amortized cost	-	18
Cash at amortised cost	702	647
	702	665
<b>Financial liabilities – measured at amortized cost</b>		
Trade and other payables at amortized cost	1,614	573
Trade payables at fair value through profit and loss	60	59
Loans and borrowings at amortized cost	936	-
	2,610	632

The basis for determining fair values is disclosed below.

Trade receivables and payables at FVTPL are recorded at fair value through profit and loss as they fail the criteria for amortised cost owing to the variability due to final pricing adjustments.

Financial instruments measured at fair value are presented by level within which the fair value measurement is categorized. The levels of fair value measurement are determined as following:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The Group's contract receivables and liabilities at 31 December 2020 are recorded at fair value through profit and loss and fair valued based on the estimated forward prices that will apply under the terms of the sales contracts on the product reaching the port of destination. The trade receivable fair value reflects amounts receivable from the customer adjusted for forward prices expected to be realised.

In the absence of observable forward prices the forward price is estimated using a valuation methodology which is based on vanadium spot prices at 31 December 2020 adjusted for the discount for AMV / calcium molybdate versus vanadium pentoxide / molybdic oxide, time value of money and carry costs. Given the short period to final pricing the time value of money and carry costs are not significant and the forward price materially approximates the spot price at year end with the adjustment to reflect the difference between vanadium pentoxide / molybdic oxide prices and AMV / calcium molybdate. Fair value of this trade receivables and payables at FVTPL is categorized at Level 3. During the year there were no transfers between levels of fair value hierarchy.

## 26 Commitments

Under the conditions of the subsoil use contract under which the Company has the right to develop and exploit the Balasausqandiq deposit the Group is obliged to undertake a minimum level of mining and to make certain levels of expenditure on the training of Kazakh employees, Research & Development and the development of the Shieli region. There is also an obligation set aside funds to provide for the eventual costs of mine closure and or site reclamation.:

- Minimum quantity of ore to be mined:

Year	Tonnes
2018	15,000
2019	15,000
2020	15,000
2021	15,000
2022	15,000
2023	545,000
2024	763,000
2025 onwards	Increase to 1,000,000 per year starting from 2025

- Training costs should be equal to 1% of the Group's capital expenditures on subsoil activities. Training costs in 2020: US\$ 2,000 (2019: US\$ 4,000)
- Research and Development should be equal to 1% of income from subsoil activities. Costs in 2020: US\$ 13,700 (2019: US\$ 11,000)
- The addition to the liquidation fund should be equal to 1% of the costs of mining ore: 2020: US\$ 12,000 (2019: US\$ 12,000)
- Expenditure on social development of the Shieli region should be equal to 1.5% of the costs of mining ore. 2020 costs: US\$ 400 (2019: US\$ 500).

All obligations have been complied except for certain exploration work programme obligations The Company has applied for the changes in the Subsoil Use contract given the force-majeure situation because of the Covid-19 in 2020. The changes that the Company has requested are related to transfer of 15 thousand tons mining ore from 2020 and 2021 to 2022 and 2023. As the result the obligation for mining in 2020 and 2021 will be equal to 0 tons; 2022-2024 will be equal to 15 K tons and starting from 2025 1 million tons of ore per year. The request is in the process of review with the government.

## 27 Contingencies

### (a) Insurance

The insurance industry in the Kazakhstan is in a developing state and many forms of insurance protection common in other parts of the world are not yet generally or economically available. The Group does not have full coverage for its plant facilities, business interruption, or third party liability in respect of property or environmental damage arising from accidents on Group property or relating to Group operations. There is a risk that the loss or destruction of certain assets could have a material adverse effect on the Group's operations and financial position.

**(b) Taxation contingencies**

The taxation system in Kazakhstan is relatively new and is characterised by frequent changes in legislation, official pronouncements and court decisions which are often unclear, contradictory and subject to varying interpretations by different tax authorities. Taxes are subject to review and investigation by various levels of authorities which have the authority to impose severe fines, penalties and interest charges. A tax year generally remains open for review by the tax authorities for five subsequent calendar years but under certain circumstances a tax year may remain open longer.

These circumstances may create tax risks in Kazakhstan that are more significant than in other countries. Management believes that it has provided adequately for tax liabilities based on its interpretations of applicable tax legislation, official pronouncements and court decisions. However, the interpretations of the relevant authorities could differ and the effect on these consolidated financial statements, if the authorities were successful in enforcing their interpretations, could be significant.

There are no tax claims or disputes at present.

**28 Segment reporting**

The Group's operations are split into three segments based on the nature of operations: processing, subsoil operations (being operations related to exploration and mining) and corporate segment for the purposes of IFRS 8 *Operating Segments*. The Group's assets are primarily concentrated in the Republic of Kazakhstan and the Group's revenues are derived from operations in, and connected with, the Republic of Kazakhstan.

**2020**

	<b>Processing \$000</b>	<b>Subsoil \$000</b>	<b>Corporate \$000</b>	<b>Total \$000</b>
Revenue	2,373	-	-	2,373
Cost of sales	(3,779)	-	-	(3,779)
Other income	8	-	-	8
Administrative expenses	(990)	(25)	(1,218)	(2,233)
Distribution & other expenses	(178)	-	-	(178)
Finance costs	(68)	-	(65)	(133)
<b>Loss before tax</b>	<b>(2,634)</b>	<b>(25)</b>	<b>(1,283)</b>	<b>(3,942)</b>

**2019**

	<b>Processing \$000</b>	<b>Subsoil \$000</b>	<b>Corporate \$000</b>	<b>Total \$000</b>
Revenue	1,841	-	-	1,841
Cost of sales	(3,178)	-	-	(3,178)
Other income	20	-	50	70
Impairment charge	-	-	-	-
Administrative expenses	(556)	(49)	(1,236)	(1,841)
Distribution & other expenses	(51)	-	-	(51)
Finance costs	(203)	-	20	(183)
<b>Loss before tax</b>	<b>(2,127)</b>	<b>(49)</b>	<b>(1,166)</b>	<b>(3,342)</b>

Included in revenue arising from processing are revenues of US\$ 2,3m (2019: US\$1.5m) which arose from sales to two Group's largest customers. No other single customer contributes 10 per cent or more to the Group's revenue.

The sales to two largest customers were (in US\$) in 2020:

London Chemicals (UK)	2.0m (87%) (2019: 2.2m (87%));
Sideralloys SA (Switzerland)	0.3m (12%) (2019: nil)

## 29 Related party transactions

### Transactions with management and close family members

#### Management remuneration

Key management personnel received the following remuneration during the year, which is included in personnel costs (see Note 9):

	2020 \$000	2019 \$000
Wages, salaries and related taxes	527	450

Refer to note 24 for details of payables to key management and the Directors' Report for shares issued to key management. Amount of wages and salaries that are outstanding at 31 December 2020 equal to \$0.5m.

#### (b) Transactions with other related parties

The Company has issued 382,025 shares to each of Mr. Thomas and Mr. Turian for their services as non-executive directors for the fourth quarter of 2019 and the whole of 2020, amounting to \$37,500 each.

## 30 Subsequent events

#### Investment agreement

On 15 March 2021 the Company signed an Investment Agreement with Vison Blue Resources Limited under the terms of which Vision Blue Resources has agreed to make investments of \$10.1m subject to certain conditions, and has options to invest a further \$32.5m at varying prices per share. In pursuit of this agreement, the Company issued 24,741,021 ordinary shares for cash at a price of 9 pence per share to raise \$3.1m to finance the further expansion of the existing process plant and completion of the bankable feasibility study.

#### Subscription for bonds

On 8 February 2021 investors subscribed for 58 of the Company's bonds with a nominal value of US\$2,000 each. The bonds are unsecured, have a three-year term, and bear interest of 7.0%, paid twice-yearly.

On 12 March 2021 investors subscribed for 184 of the Company's bonds with a nominal value of US\$2,000 each. The bonds are unsecured, have a three-year term, and bear interest of 7.0%, paid twice-yearly.