



PETROPAVLOVSK

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25

**Celebrating 25 Years
of Technical and
Gold Mining Expertise**



Petropavlovsk

is a London premium-listed,
Russia-focused gold mining
and R&D business

7.6Moz

Gold produced
to date

17 years

Average mine life

514koz

Au sales in 2019

1

of only two POX
plants in Russia



Purpose

“To use our unique technical skill set and mining capabilities to realise the value of our gold assets for the benefit of all stakeholders, while enhancing the lives of the communities and respecting the environment within which we operate.”

Our Values



Responsibility

We place people first. Responsible practices are our highest priority and we aim to operate safely, efficiently and transparently, continually seeking new ways to ensure an injury-free workplace. We are committed to preventing pollution, minimising waste, increasing carbon efficiency and optimising natural resource usage. We develop innovative solutions to mitigate environmental risks and welcome an active dialogue with all our stakeholders and local communities.

Innovation

We challenge ourselves and others to constantly look beyond the latest scientific and engineering developments worldwide. Our aim is to be a respected industry leader in safety and environmental practices, whilst realising the full potential of our assets through ingenuity, drive and innovation.

Integrity

We believe that honest communication, sound business ethics and respect for people are the foundation of our business and we deal with all our stakeholders in a respectful, responsible way. We are guided by our Code of Business Conduct and Ethics in every situation, at all levels of the Company, to preserve dignity and self-worth in all our interactions.

Excellence

We are focused on delivering results and on doing what we say we will do. We accept responsibility and hold ourselves accountable for our work, behaviour, ethics and actions. We aim to deliver high performance outcomes and undertake to deliver on our commitments to our colleagues, business and social partners, and our investors.

Diversity

We strive for excellence and recognise that our differences make us stronger. By creating an inclusive and fair workplace, we are ensuring not just diversity of people and skills, but ideas too. This is the basis for a culture of creativity, which supports the innovation that we value and is a benefit to all stakeholders.

Our Culture

Inclusive

Without an inclusive culture, diversity is nothing and we believe a culture of equality is a multiplier of growth and innovation. We aim to foster an inclusive culture that cultivates respect and equality, and which positively recognises differences.

Happy

A positive and happy workplace environment is key to increased job satisfaction, higher rates of productivity and reduced workplace stress. This is reflected in reduced employee turnover and enables the Company to attract and retain top talent.

Creative

Creativity and problem solving have been part of our DNA since the Company was formed and our research & scientific institutions are a key differentiator of the Group and capable of delivering superior value to our stakeholders. Additionally, a workplace culture that encourages creativity leads to happy, motivated and more productive employees.

Rewarding

Showing appreciation for achievement, whether professional or private, through recognition reflects the value we place on our employees and the effort made by each team member. We understand that recognition can take many forms and adapt these to reflect to the different geographic cultures of the Group and the diversity of our employees.

Enabling

The success of our Company is ultimately based on our employees having successful careers, and progression and advancement is a key ethos for the Group. Many of our employees were educated as students for free by Petropavlovsk and continuous learning is encouraged as part of their ongoing development as professionals.

Our Strategy

The Group's strategy is to create superior value for shareholders through six fundamental objectives

1. Maintain and expand gold reserves and resources.
2. Unlock the value creation potential of the POX Hub.
3. Optimise costs and operational efficiencies.
4. Strengthen the balance sheet and increase liquidity.
5. Continuously improve sustainability practices.
6. Develop and nurture current and potential employees.



Investment Rationale

Petropavlovsk is a leading vertically integrated Russian gold miner. With a premium listing on the Main Market of the London Stock Exchange, the Company is one of Russia's largest gold producers.

Having operated continuously in the Far East of Russia for over 25 years, from where it has produced more than 7.6Moz of gold, the Company has a strong track record of mine development, expansion and asset optimisation.

The Company is one of the major employers and taxpayers in the Amur region and benefits from strong relationships with the local communities in which it operates.

The POX Hub

The Pressure Oxidation facility ([‘POX Hub’](#)) is a cornerstone of Petropavlovsk's strategy and the principal driver of future value for the Company. The POX Hub is a world-class facility and one of only two in Russia.

The POX Hub was commissioned late in 2018 and began ramping up in early 2019, onwards and can treat both Petropavlovsk's

own abundant refractory gold reserves as well as those of third parties. Not only does this enable the Company to increase gold production but also reduce cash costs - it also means that Petropavlovsk is in a strong position to consider stranded refractory ore deposits in the region and across Russia.

The POX Hub is well located in terms of easy access and well-developed infrastructure. The anticipated growth in cash flow from processing its own and third-party ore will be used to strengthen the balance sheet, which will then enable the option of paying dividends to our shareholders.

Significant assets

Petropavlovsk has three active gold mines: [Pioneer](#), [Albyn](#) and [Malomir](#) and gold licences which cover an area of more than 3,200km² in Russia. The mines are a mix of open pit and underground, with c.15Mtpa ore processing capacity in addition to the 500ktpa potential of the POX Hub. Petropavlovsk today has a long-life mineral resource base with high expansion potential.

Experienced management and technical expertise

Through 25 years of operating in Russia, the Company has established itself as a successful explorer, developer and miner of gold, with all its active mines being developed from initial greenfield discoveries. Petropavlovsk differentiates itself from its peers through its technological expertise and R&D capabilities. The Company owns several world-class institutes, including Irgiredmet and NIC Gydrometallurgia ([‘RDC Hydrometallurgy’](#)), which are responsible for the innovative design of its processing plant and continuous improvement of its processing operations.

Deleveraging

The Company's Net debt / EBITDA was 2.1x as at 31 December 2019, and Board has set deleveraging as a management priority given the need to strengthen the Company's balance sheet and liquidity position. The key driver of increased cash flow to the Company is the POX Hub which was commissioned in 2018 and began ramping up in early 2019.

Strong Board and Governance

Petropavlovsk has a strong and experienced [Board](#), which is fully compliant with the UK Corporate Governance Code in terms of composition and diversity, including eight Independent Non-Executive Directors with a strong range of skill sets ranging from auditing, mining, investment banking and legal. We have an established Code of Business Conduct and Ethics.

ESG principles

[Sustainable development and responsible business practices](#) have always been integral to our operations. Since the early years when Petropavlovsk received financing from the IFC, the Group has adhered to strict ESG principles and the very high H&S standards required under Russian law in addition to operating in line with international best practices. The Company

has a strong Sustainability track record and strives for continuous improvement for the benefit of all stakeholders. As part of its ESG strategy, Petropavlovsk joined the UN Global Compact Initiative on corporate sustainability and further enhanced its Corporate Social Responsibility (‘CSR’) framework, among other achievements.

Our Response to the COVID-19 Pandemic

Dr Pavel Maslovskiy *Chief Executive Officer*

“The health and safety of our workers and the local communities within which we operate remains our highest priority during this challenging period. Petropavlovsk continues to maintain open dialogue with the authorities to monitor the situation and ensure the Company is abiding by all measures and restrictions.”



Health and safety update

At the time of publishing, none of Petropavlovsk's employees have been diagnosed with COVID-19.

There have been relatively few cases registered in the Amur region which is a sparsely populated area roughly equivalent to half the size of France.

While our mining operations and POX Hub are naturally isolated and away from population centres, the Group has also implemented measures in each operating jurisdiction to meet Government guidelines and which are appropriate to the specific needs of each location including its head offices.

High-level management actions taken include:

- An emergency response team has been formed to limit the spread COVID-19 at the Group's Companies. Members of the response team are working in co-operation with local authorities, when and if, required;
- The response team includes representatives from each of the Group's businesses in Russia, and coordinators have been appointed at each location who are responsible for preventative and counteractive measures; and
- Group business travel has been restricted and the Company's Moscow and London offices have been closed until further notice, with written permission required to enter buildings.

Employee and community actions taken include:

- Mine shift patterns have been adjusted to lower the frequency of new teams arriving onsite;
- Before commencing each shift, employees and contractors are required to undertake 14 days quarantine in four purpose-built camps, with virus testing on arrival and before moving to the sites;
- Medical infra-red thermometers are used daily to take the temperature of employees;
- Designated isolation zones have been set up to house any individuals showing flu-like symptoms;
- In addition to the recommended hygiene measures, a comprehensive site awareness campaign is being carried out; and
- Awareness programmes targeting the local community have also been put in place, and the Company is supporting local businesses and the community through the distribution of masks and hand sanitisers.

Legislative update

- In response to the COVID-19 outbreak, the Russian Government has been introducing a wide range of measures including non-work period (from which Petropavlovsk is exempt as a continuous process organisation). It has also expanded the authority of regional heads to set further specific measures relevant for their regions;
- While the non-work period was officially lifted by the Federal government, most regional authorities are maintaining the restrictions;
- Other measures include certain tax, credit and reporting holidays which are of benefit to certain suppliers to the Group's business; and

- Petropavlovsk has been included in the most recently revised Federal list of Russia's systemically important companies. Additionally, the JSC Pokrovskiy Mine (including Pioneer), LLC Albynskiy Rudnik (Albyn) and LLC Malomirskiy Rudnik (Malomir) companies were all identified as being strategically important to the Amur region. This entails more stringent oversight by the Federal authorities and local Ministry of Economic Development as well as the executive branch of local government, and the Company believes this reduces the risk of business interruption.

Logistics and sales update

- The Company continues to monitor its supply chain and is putting in place all necessary precautions to ensure business continuity;
- While the Central Bank of Russia has temporarily suspended gold purchases, commercial banks in Russia continue to buy gold bullion and the Company continues to sell gold through Russian commercial banks; and
- The Company also can export gold bullion and confirms that it has the necessary licences in place required to export gold for sale outside of Russia, and that it commenced gold shipments to the UK and Switzerland from 2020.

Pioneer flotation plant construction update

- Despite lockdown measures in place, all key equipment items necessary to complete construction of Petropavlovsk's second flotation plant have now arrived in Russia, thus ensuring the project remains on track for Q4 2020 commissioning; and
- Once operating at full capacity, the new flotation plant at Pioneer will double the Group's flotation capacity from 3.6 to 7.2Mtpa.

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Non-Financial Information Statement

We aim to comply with the Non-Financial Reporting requirements contained in sections 414CA and 414CB of the Companies Act 2006.

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Chairman's Statement



Sir Roderic Lyne

The COVID-19 pandemic casts an inevitable shadow over this Annual Report. We have described at the beginning of the Report the rigorous measures Petropavlovsk has implemented to protect our employees and our operations. At the time of writing, in mid-May, no cases of infection have been reported within the company. While some aspects of business have become more difficult, we have been able to sustain full operating capacity; and we have benefited from the upward pressure on the gold price. That said, it is impossible to predict what effects the pandemic may have in the months ahead, save that we are clearly facing a prolonged period of high volatility in the global economy. As we explain elsewhere in this Report, the potential consequences of the pandemic must stand at the head of our register of risks.

I had hoped to begin my final report as Chairman on a more cheerful note. Within this sombre and uncertain environment, the better news for all of our stakeholders is that 2019, continuing into the current year, has been one of the most successful periods in the quarter-century history of the Group.

In the course of 2019, Petropavlovsk has met the corporate purpose defined by the Board, which is to use our unique technical skill set and mining capabilities to realise the value of our gold assets for the benefit of all stakeholders, while enhancing the lives of the communities and respecting the environment within which we operate.

Petropavlovsk's shares have significantly outperformed the major gold miners quoted on the London Stock Exchange, both over the course of 2019 and the first quarter of 2020. Our shares rose by 102% during 2019. At the time of writing, a share in Petropavlovsk is worth more than three times its value at the 2018 AGM, when the current Board was elected. Cash flow has increased and gold sold in 2019 grew by 39% to 514,000 ounces and our guidance is for a further substantial increase in production to between 620,000 and 720,000 ounces in 2020, including third-party processing.

Aside from the benefit to all gold mining companies from the past year's rise in the price of bullion, there are a number of specific reasons why Petropavlovsk has outperformed the market, strengthened its competitive position and built a solid foundation for value accretion in the years ahead.

First and foremost, is the exceptional performance of the Group's executive team and skilled workforce under the leadership of Dr Pavel Maslovskiy, who returned as CEO in June 2018.

Over ten years ago, Dr Maslovskiy initiated a project to construct a Pressure Oxidation plant at Pokrovskiy in order to process the refractory ores which are abundant in Russia and represent approximately 71% of the Group's Reserves. This required a large capital investment, of some US\$310 million; lengthy preparation; and careful technical training of its operators. Pressure Oxidation plants are complex operations and elsewhere in the industry have often proved difficult in the start-up phase. The POX plant came into operation at the end of 2018. It has run remarkably smoothly through 2019 and has added materially to the Group's production. To increase the near-term supply of refractory concentrate to the POX Hub, our technical experts have improved the flotation plant at Malomir; and we are investing in a new flotation plant at Pioneer (due for commissioning from Q4 2020), where there are 2.07 million ounces of refractory reserves.

The POX plant, with its four autoclaves, is one of only two Pressure Oxidation plants in the Russian gold industry, and the largest. We are using spare capacity to process third-party concentrate purchased from other producers and plan to increase our own production of refractory concentrate through expanding our flotation capacity, exploration and low cost acquisition. The development of the POX plant has opened new horizons for Petropavlovsk and has put the Group in a very strong competitive position.

Second, we have worked to strengthen the balance sheet. We have restructured the IRC debt guarantees and refinanced US\$100 million of convertible bonds due in 2020. Petropavlovsk's ratings with credit agencies have improved, putting the Group in a stronger position to undertake further liability management, including deleveraging and reducing the cost of servicing debt. This is a key strategic objective.

Third, we are pursuing an approach of continuous improvement in all areas of the business and of investment in both people and technology. Over the past year, the Board and Executive team have taken steps to enhance the Group's financial reporting and audit functions; to upgrade risk management; to develop the work we have done over many years on environmental and social issues; and to establish a clear channel of communication between the Board and the workforce. Danila Kotlyarov has joined us from IRC as the new Chief Financial Officer and has since become an Executive Director. The Safety, Sustainability and Workforce Committee of the Board has strengthened oversight of safety issues, and we are pleased to report on a year with no fatalities and a significant fall in the Lost Time Injury Frequency Rate. Petropavlovsk has joined the United Nations Global Compact Initiative on corporate sustainability, reflecting our commitment to ten established principles in human rights, labour relations, the environment, and anti-corruption measures.



Fourth, after the period of turbulence which damaged the Group in 2017-18, the Board has restored stability to the leadership and reputation of Petropavlovsk and has placed strong emphasis on rigorous corporate governance. Since November we have welcomed four new, highly-qualified independent non-executive Directors – Katia Ray, Charlotte Philipps, Fiona Paulus and Tim McCutcheon. The Board now benefits from the varied experience of eight independent non-executive Directors, in addition to the Chairman. They are diverse in gender, age, nationality (of five different nationalities at birth), and professional background. They have had careers, respectively, in banking, accounting and corporate finance; operational mining; natural resources investment, analysis and consultancy; and law and business development. Until February 2020, the Group's largest shareholder, the Aeon Mining Limited, was represented on the Board by Mirzaaziz Musakhanov. Mr Musakhanov left the Board when Aeon's shareholding was acquired by Uzhuralzoloto Group of Companies ("UGC"). On 21 April 2020 Maxim Kharin joined the Board as a Director nominated by UGC.

To sum up, over the past year the Group has built a platform for growth. The Board has initiated a review of the Group's strategy which is reflected in the "[The Group's Strategy](#)" section of this report and is intended to give clear definition to both short-term and long-term objectives. Petropavlovsk seeks to become at least the third largest producer of gold in Russia in terms of gross profit. We aim to raise shareholder value by fully exploiting the potential of the Pressure Oxidation Hub and increasing the grades of concentrate fed through it; by decreasing leverage towards a targeted Net debt / EBITDA ratio of below 2.0x; by reintroducing a dividend programme; and by reviewing value-accretive merger or joint venture options. We shall seek to sustain or expand the Group's reserve base through exploration and seeking opportunities for small-scale acquisition of low-cost resources. It will be our objective to achieve these targets with a top-quartile safety record and zero fatalities, while maintaining the highest environmental standards in the Russian mining sector.

The Group's strategy is ambitious but realistic. We shall continue to take a conservative approach to risk. We shall live within our means, seek continuous improvement and guard against complacency. Above all we seek to build on Petropavlovsk's technical strengths – the lead the Group enjoys in the processing of refractory ores through Pressure Oxidation, and the excellence of our geological, analytical, research, engineering development and training teams.

Finally, I should record that I shall be retiring from the Chair at the Annual General Meeting. I have had the privilege of serving on Boards within the Group for twelve of the past fourteen years. Together with Pavel Maslovskiy and Robert Jenkins, I was asked by shareholders to return in 2018 to help stabilise the company, revive momentum and restore its reputation in the markets. With these objectives achieved, I asked the Board last autumn to look for a younger successor who could lead the Board through the next phase of its strategy for growth. After a meticulous process of search and interview, the Board has recommended that Fiona Paulus should take over the Chair. Having had a distinguished career in investment banking and extensive Board experience, Fiona Paulus is superbly equipped for the role. COVID-19 permitting, I believe that, under the leadership of Fiona Paulus and Pavel Maslovskiy, Petropavlovsk can look ahead to 2020 and beyond with optimism.



Sir Roderic Lyne
Non-Executive Chairman

26 May 2020



Dr Pavel Maslovskiy

On the Company's 25th anniversary, I am pleased to report that 2019 was a positive year in our development, with strong corporate and operational progress. This further builds on the solid foundation we have developed over the years and bodes well for our future as a sustainable gold miner and producer. The successful ramp-up of the POX Hub is a significant event in the Company's history given it is the cornerstone of our future strategy and principal driver of value creation for our shareholders. Not only did the plant exceed all expectations in its first year, but the associated flotation plant at Malomir also operated above design rates in several key areas which bodes well for a successful start-up of Pioneer flotation plant when it is launched later this year.

In respect of our shareholders I am especially pleased that these developments and the successful turnaround of our business are being recognised through a re-rating of our equity, with our share price rising 102% in 2019 compared to a 18% increase in the price of gold.

The POX Hub

The delivery and ramp-up of our unique plant, which can treat multiple sources of even the most complex refractory gold concentrate, is testament to the strength of the Company's scientific and engineering capabilities.

The POX Hub exceeded even our optimistic expectations, with 193.2koz of gold recovered from refractory concentrates during its first 12 months of operations. Of this amount, 132.0koz came from concentrates produced at our own mine, Malomir, leading to an increase of 132% in gold produced at Malomir compared to a year ago. Gold recoveries from Malomir concentrates increased steadily at the POX plant through the year to reach above design during the fourth quarter; whilst productivity and utilisation-hours for key equipment items exceeded design rate and all four autoclaves have been shown to operate at stable rates at full capacity.

Starting in July, the POX plant began treating third-party concentrates from several sources, quickly achieving the design recovery rate, and 61.2koz of gold were recovered. Importantly, this demonstrates our ability to treat a variety of concentrates which puts Petropavlovsk in a strong position to meet our 2020 production targets given this significantly widens the scope of third-party material that can be acquired and successfully treated.

Optimising the capacity of the POX Hub is now critical for the team, and I am pleased to report that the Group's second flotation plant, which is being constructed at Pioneer, will double the Group's capacity to produce concentrate from its own refractory gold ores to 7.2Mtpa and remains on schedule to contribute from the fourth quarter. Subject to Board approval, an expansion of the flotation plant at Malomir would further increase the Group's concentrate capacity to 9.0Mtpa. A feasibility study on the Malomir expansion is underway, and I look forward to updating stakeholders on our progress then.

Operational Performance

The performance at our mining operations was in line with expectations, with strong performances from Malomir and Albyn offsetting weakness at Pioneer caused by the processing of harder ores and challenging geotechnical and hydrogeological issues encountered at the start of the year. Albyn was the standout performer with production rising c.13% from the previous year due to an increase in the volume of higher-grade ore combined with consistently high recoveries at the RIP plant. Malomir successfully underwent the transition from being non-refractory to being predominantly a refractory mine such that, in the fourth quarter, around 87% of total gold recovered at Malomir came from refractory ores. This enabled production volumes to increase significantly and this was further helped by the strong performance of the flotation plant where concentrate grades were around 18% above design. Gold recoveries exceeded the design rate of 93% for the first time in November for Malomir concentrates.

Production and Costs

For 2019, total gold production, including production from third-party concentrates, increased almost 23% to 517.3koz. Production from our own mines amounted to 471.6koz which is in line with guidance given at the start of 2019 of between 450 – 500koz despite the unforeseen geological issues encountered at Pioneer and extreme weather events of last summer that caused multiple floods in the region. Of the three mining centres, Albyn contributed 33% of total gold production for the year, while Pioneer contributed 23% and Malomir 35%. The remaining 9% came from third-party concentrates.

In the first full year of operations at the POX Hub, around 28% of gold produced from our own mines was from refractory ores and this rises to around 35% when including third-party concentrates.

Total Cash Costs* were 10% higher at US\$749/oz, up from 2018 (US\$678/oz) due to additional costs associated with the ramp-up of the POX Hub. All-in Sustaining Costs* decreased by 5% to US\$1,020/oz compared to 2018 (US\$1,079/oz).

Total Cash Costs* were affected by inflation of certain Rouble denominated costs, costs associated with the ramp-up of the POX Hub and Malomir flotation, application of the full 6% mining tax rate at Pioneer and progressive increase in mining tax rate to 1.2% at Albyn and Malomir, which was partly offset by higher grades at all mines and higher recoveries at Pioneer and Malomir as well as Rouble depreciation.

The decrease in All-in Sustaining Costs* primarily reflects reversal of impairment of non-refractory ore stockpiles at Albyn as well as the increase in physical ounces sold in 2019 with an aggregate of sustaining exploration and capital expenditures related to the existing mining operations and underground mining projects at Pioneer and Malomir, Malomir flotation, and capitalised stripping expenditure during the period remaining at approximately the same level as in 2018. This effect was partially offset by the increase in Total Cash Costs*.

Responsible Business

The health and safety of our employees remains our number one priority and, while I am pleased to report zero fatalities and a significant reduction of the LTIFR by 36% in 2019, the basis of our strategy is continuous improvement with zero harm as our ultimate target. The initiatives undertaken in 2019 included an increase in health and safety training and stricter onsite safety monitoring procedures and these will be continued and further improved in 2020. I am also pleased that there were zero major environmental harm incidents in 2019, for the tenth consecutive year.

In terms of governance, the skills, composition and diversity of the Board were further enhanced by the appointments of Charlotte Philipps, Katia Ray, Fiona Paulus and Tim McCutcheon as independent Non-Executive Directors, Danila Kotlyarov as an Executive Director and Maxim Kharin as a Non-Executive Director.

Recognising the value that responsible business practices create, a new comprehensive ESG programme, is being developed and implemented to raise the Company to a new level of responsible mining with a focus on sustainable development and excellence in governance. As part of this programme, it is our intention to align our operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption, and to act in support of the UN goals and issues embodied in the Sustainable Development Goals (SDGs). This programme is being undertaken as part of our participation in the United Nations Global Compact Initiative on Corporate Responsibility, for which I am proud to have become a supporter.

Exploration

Our exploration programme continued its strategy of extending known orebodies as well as exploring new deposits to secure the future of our business, with an increasing focus on revisiting known refractory gold deposits given the successful start-up of the POX plant. As a result, total reserves increased to 8.46Moz, while total Measured, Indicated and Inferred Resources which include reserves, increased to 21.03Moz (after accounting for depletion caused by mining).

In respect of extensions to known reserves, intersections made below the open pit at NE Bakhmut 1 have led to the possibility of expanding the pit shell and thus extending the mine life. At Elginskoye, which is expected to commence production in the second half of 2020, we are optimistic that drilling outside of known resources will lead to their increase given encouraging intercepts during the year.

In terms of earlier stage exploration, our team had a successful year at Osipkan, a satellite of Tokur which lies around 130km from Malomir, where two zones of mineralisation have been discovered which are equivalent to JORC gold resources and further exploration will be conducted on these.

Outlook

It is my firm hope that the increase in cash generated as the POX plant ramps up will enable the Group to rapidly normalise Net debt / EBITDA in line with the Company's goal of balancing between deleveraging, capital investment and rewarding shareholder patience through paying dividends.

As outlined in our response to the COVID-19 pandemic on [page 6](#), the Company has reacted swiftly to protect the health and welfare of its employees and local communities, whilst ensuring the continuity of its business operations and development projects.

However, given the ongoing uncertainty that all businesses face, as an additional measure, I am pleased that Gazprombank has approved a gold prepay limit of c.392koz or c.US\$470 million, which is valid through to the end of May 2024.

I would like to thank our employees, Board, shareholders, host Government, communities and suppliers for your support in 2019 and look forward to updating you as the business continues to progress.



Dr Pavel Maslovskiy
Chief Executive Officer

26 May 2020

Celebrating 25 Years of Technical and Gold Mining Expertise

From humble beginnings



1995: Exploration camp



2000: First accommodation camp blocks at Pokrovskiy



1999: Winter heap-leach patented by Petropavlovsk

Dr Pavel Maslovskiy *Co-founder of Petropavlovsk*

“When I consider Petropavlovsk today, with its three large-scale gold mines, over 21 million ounces of JORC Resources, and a processing capacity of around 15 million tonnes of ore per annum in addition to our state-of-the-art POX plant, it gives me great pride to reflect on our history and the strides we have made over the last quarter of a century.

With the enduring support of our employees, Board and management, shareholders and other stakeholders, we have created one of Russia’s largest gold producers from nothing. And whilst we have encountered challenges along the way, I believe that, on the 25th anniversary of the Company I helped co-found, we can be very proud of our business’s strong foundations and excited by the road ahead.

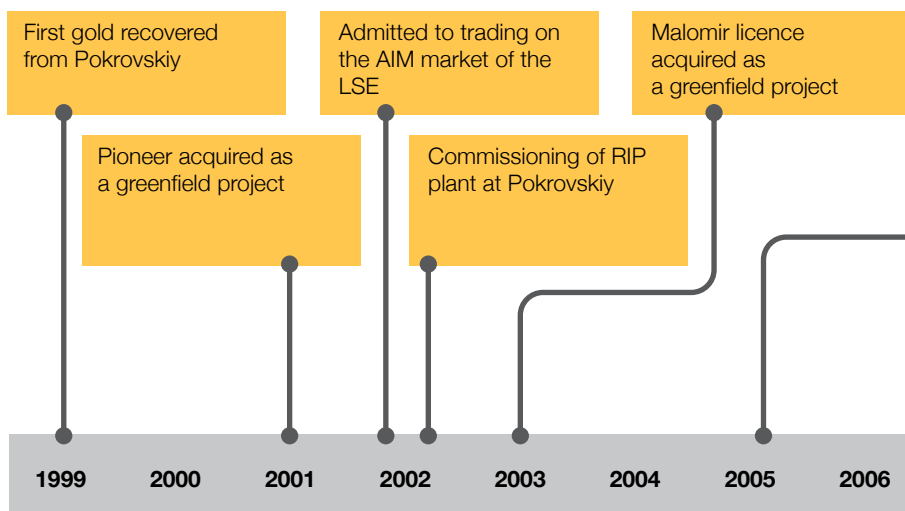
Thinking back to the humble beginnings of our early days at Pokrovskiy – Chairman, Chief Engineer and Chief Manager all working side by side with other team members 24 hours a day to install the small second-hand processing plant we brought over from the US – I find it quite remarkable to consider all the achievements we have made.

Founded in 1994 as JSC *Pokrovskiy mine* to bid for the Pokrovskiy gold deposit, the Company produced its first gold in 1999 from a 600,000 tonnes per annum heap-leach operation. Having worked tirelessly to finance the initial stages of the mine, run operations on a modest budget and, with a total reliance on doing everything ourselves, we were then able to direct the ensuing cash flow from these early ounces into developing proper infrastructure at the mine and constructing our first Resin in Pulp

(‘RIP’) plant. This constituted an important stage in the Company’s progress and a step change for the business, which previously had struggled with low recovery rates, particularly during the winter months despite the team’s ingenious ‘budget’ heating system (shown in photo below left) which used wood burners and plastic sacking and which, nonetheless, won widespread acclaim and more importantly worked!

Even in those early days, we were dependent on our in-house capabilities – from engineering to welding, from construction to baking bread – and I believe this was instrumental, not just in keeping a strict control on costs, but also in building our foundations as a team and cultivating the entrepreneurial spirit of the Company.

Pokrovskiy went on to yield c.2 million ounces of gold and paved the way for the commissioning of three further mines and plants in the Russian Far East, all of which were explored, defined and developed by our in-house mining and technical teams. Subsequently, the exhausted Pokrovskiy mine site was reclaimed as the location of our new state-of-the-art POX Hub facility.





It is not surprising, perhaps, that the same values of innovation, integrity and excellence which prevailed then still exists today and have been the driving force behind the growth of Petropavlovsk from these humble beginnings to having a premium listing on the Main Market of the London Stock Exchange with annual production of over half a million ounces. Furthermore, the delivery and smooth ramp-up of our unique POX plant, which can treat multiple sources of even the most complex refractory concentrate, is testament to the strength of our

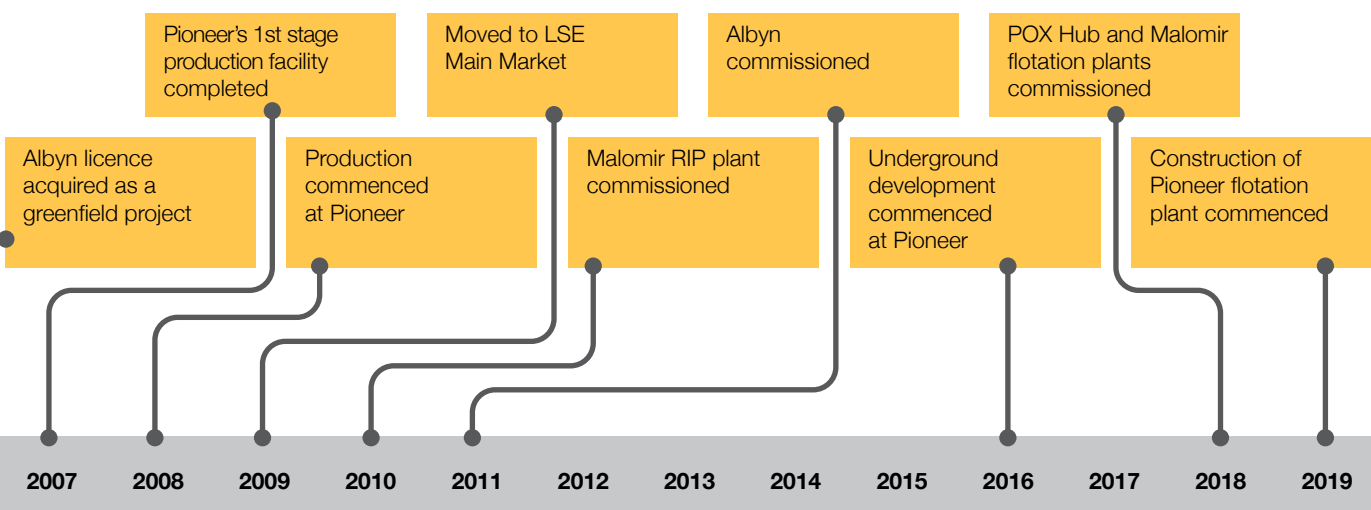
Company's scientific and engineering capabilities; and I believe Petropavlovsk is second to none in terms of possessing such skills and capabilities.

Creating value for the Amur region and its people

Located in the Russian Far East, on the border with China, the Amur region has become one of the largest gold producing regions in Russia as a result of Petropavlovsk.

It is hard to believe now, but back in 2002 we were one of the first mining companies

with solely Russian assets to achieve admission to trade on the AIM of the London Stock Exchange. With a maiden turnover of just US\$23 million, we had the ambitions of a significantly larger organisation - to create sustainable value for Amur and its people. We have since grown to become one of the largest businesses in the region and our contribution to the local economy is significant and I expect will continue to be for generations to come. Petropavlovsk is recognised as a leading taxpayer in the region.



Celebrating 25 Years of Technical and Gold Mining Expertise continued

We have always maintained a preference for developing and employing local expertise – whether in the form of mine management, engineers, technicians or suppliers. Our management team consists predominantly of Russian nationals. Many have been with the Group since its inception and possess a range of skills spanning the mining spectrum, as well as an in-depth knowledge of the Russian gold mining industry, the legislative and regulatory environment and an understanding of local conditions.

Local hiring from the Amur region stands at 65.3%, with a total of 99.7% from Russia as a whole. From a workforce of 17 in 1994, we have grown to employing over 9,000 people where our average wage paid is 32% above the national average. We are particularly proud to have an exceptionally high, and growing, ratio of female employees which, at c.25%, compares very favourably with the industry as a whole.

Recognising it is our responsibility to make a meaningful contribution to the communities that host us, Petropavlovsk has invested heavily in social development throughout its history. In the beginning, this involved investments into specific projects, such as the construction of a new school, assistance provided to an orphanage and the provision of educational facilities. In 2010, we took the decision to formalise our approach with the creation of the Petropavlovsk Foundation.

I am pleased to say that we have provided ongoing support in the form of community investment to the tune of over US\$30 million since 2001. Together, this has had a huge impact on the socio-economic and cultural development of our local communities as well as uplifting the lives of many.

Innovation and technical excellence

Over the years, we have amassed a highly skilled and ambitious team of mining experts and specialists and it is our passionate and dedicated staff that brought us to where we are today.

Underpinned by our values of responsibility, innovation, integrity, excellence and diversity is our creative culture. By constantly challenging ourselves to discover new ideas, better solutions and inventive technology, we have achieved significant feats over the years, often in the face of great adversity.

Our latest achievement has been the successful development of the POX Hub which is the largest and most technologically

advanced plant of its kind in the country. In order to recover gold from refractory ore, which accounts for more than two thirds of our reserves, a complex technical solution was required. It is testament to our excellent research and development centres, as well as our strong partnership with Outotec, that we have been able to realise this ambition. By embracing one of the most advanced technologies in the industry, we are now able to unlock the significant value of our own reserves and those of third parties.

The Group has always focused on nurturing talent and facilitating career development for its employees. In 2008, we established a specialist mining college near Pokrovskiy and are particularly proud to have provided training to over 10,000 students since then. This not only gives people in the area a significant opportunity for professional development, but also provides the Company with a valuable pool of skilled local talent.

Growing responsibly

High social and environmental standards have always been a key focus for Petropavlovsk and, when financing the development of the Pokrovskiy mine in the early 2000's, we attracted investment from an institution with the most rigorous ESG standards; the International Finance Corporation. Consequently, we were one of the early proponents of sustainability reporting in the mining industry, providing ESG commentary as early as 2003 and our first standalone sustainability report for 2006. Today, we are one of the few mining companies to report safety and environmental data alongside quarterly production results, and we are continuously looking to improve our performance in this integral aspect of the business. With the introduction of more ESG targets from 2020, we are committing to meaningful positive change and to minimising our negative impact.

As the Company and the broader regulatory and governance landscape has evolved, so too has our Board and we are delighted today to have the team with the right blend of experience that will take us forward into the next chapter of our development.

Positioned for a sustainable future

Having achieved a substantial turnaround of the business and strengthened our foundations by commissioning and ramping up the POX Hub, I believe we are well positioned to significantly de-risk the balance sheet. However, the path has not always been paved with gold. I think it was Winston

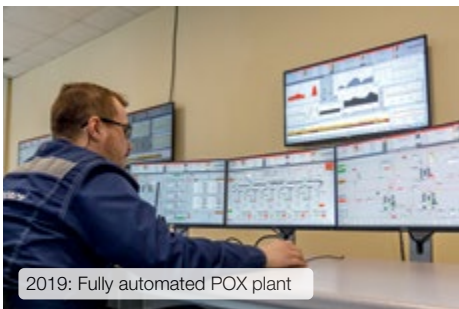
Churchill who said: "All men make mistakes, but only wise men learn from their mistakes" – in Russian, we say 'a beaten man is worth two who haven't been beaten'. There can be no doubt that we have learnt important and costly lessons along the way, although I believe these lessons have set us in very good stead for a bright and enduring future.

The hurdles we have encountered have served to heighten our agility as a business as well as reinforce our resourcefulness. We have weathered many a storm to come out the other side stronger and better equipped. In this respect, I wish to give specific mention to the loyalty and patience of our shareholders, and I am one myself, and I appreciate this has not been an easy journey in the past few years. We must never forget that mining is the most cyclical of all industries. We have learned through painful experience that our decision-making, particularly where it involves the debt financing of large-scale projects, needs to consider a long-term and ultra-conservative view of commodity prices.

Today, with our major capital expenditure programme behind us, we forward look to a much brighter future. With a steadfast focus on margins, we expect to generate sustained cash flow from our installed asset base, which will enable us to pay down debt and thereby improve return on equity plus reward shareholders in the form of dividends.

The diligence and resilience of our team knows no bounds and I am endlessly grateful for their continued dedication.

I would like to thank all those who have made the last 25 years such an incredible journey and wish the Company, its employees and shareholders, all the best for the next 25 years."



2019: Fully automated POX plant



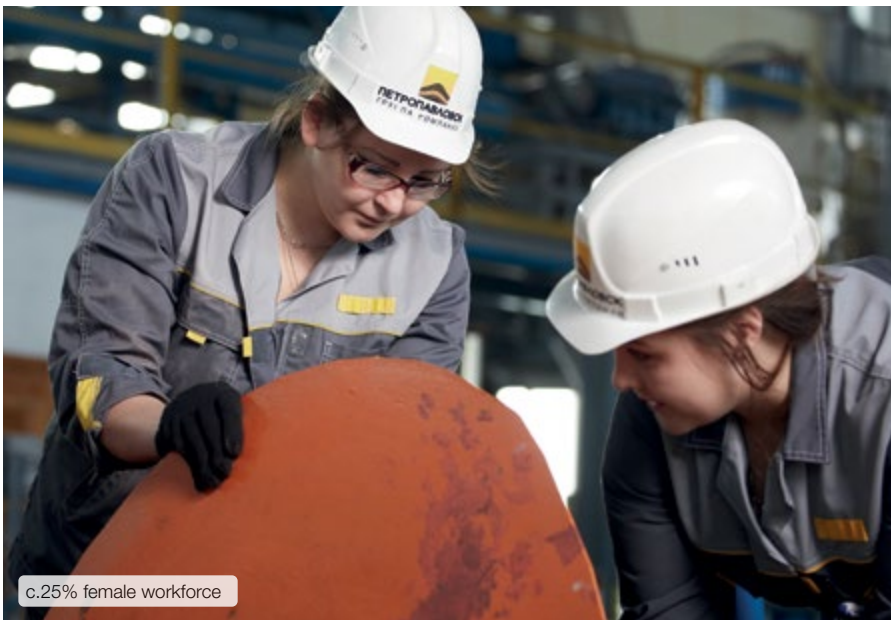
7.6Moz gold produced



2019: POX Hub



World-class R&D facilities



c.25% female workforce



c.US\$30 million invested in local community since 2001

Our Business Model

The Cycle

Our business model was designed to implement our [Purpose](#) of using our unique technical skill set and mining capabilities to benefit all stakeholders, with sustainable development embedded at every stage of the mining lifecycle, from identifying prospective areas to exploration, development, mining and processing.



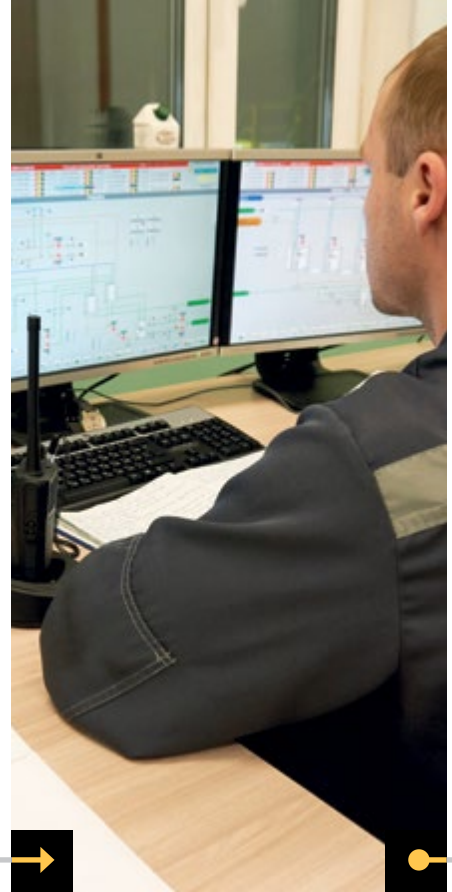
1. Exploration and Evaluation

We have a strong track record of identifying, exploring and appraising deposits with commercially viable concentrations of gold in both brownfield and greenfield sites. These deposits replenish and increase our resource base.



2. Mining and Development

Our operating experience allows us to achieve optimal ore extraction from our open pit and underground assets. This, along with the scale of our asset base, enables us to increase processing capacity and operating profits.



3. Technology

We have harnessed our industry-leading expertise in processing technologies at the Group's research centre [RDC Hydrometallurgy](#) to design and construct a pressure oxidation circuit at Pokrovskiy (the "POX Hub") as well as associated flotation plants at Malomir and Pioneer (under construction). RDC Hydrometallurgy also determined the optimal processing parameters for the plants and continues to seek ways to improve their performance, as well as design new technologies for the future processing of refractory gold ores.



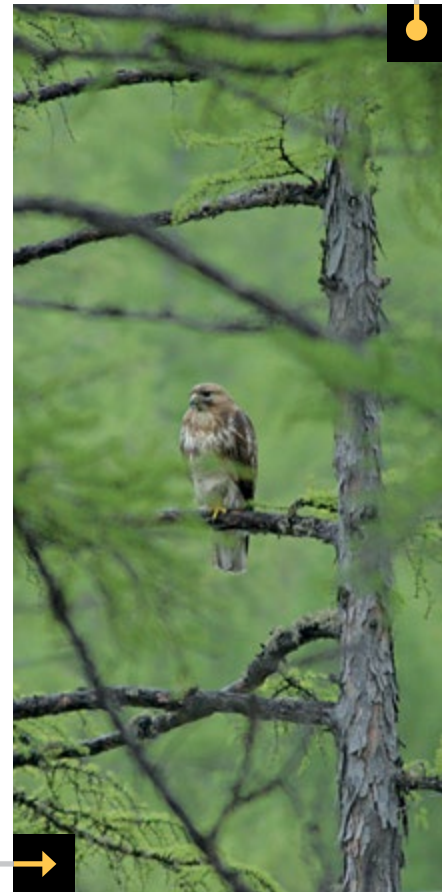
4. Processing

In addition to the traditional Resin-In-Pulp (RIP) technology used for extracting non-refractory gold from ores, the Group also owns one of only two POX plants in Russia which enables it to recover gold from refractory ores. The plant is currently processing refractory gold from its own mines as well as from third parties, and is the only plant in Russia capable of processing double-refractory gold ores.



5. Production

We produce gold doré bars which are sent to refineries for smelting into bullion. Currently, all of the doré produced at Petropavlovsk is either sold to banks in Russia or exported.



6. Mine Closure and Rehabilitation

Mine closure planning is integrated into the asset life cycle. This ensures responsible environmental compliance and the sustainable development of mines in the project areas.

How did gold perform in 2019?

2019 was a strong year for gold, with prices rising 18% to reach a six-year high, commencing the year at US\$1,279/oz and ending at US\$1,515/oz. Prices traded within a range of US\$1,270/oz – US\$1,546/oz and averaged US\$1,392/oz, which is a 10% increase on 2018. On a relative basis, while gold outperformed silver (+16%) and the Bloomberg Commodity Index (+5%) it could not quite match the returns generated by platinum (+21%) and palladium (+54%).

What factors may have influenced the gold price during the year?

Gold's performance has likely benefitted from its safe haven status, with 2019 being an eventful year in terms of political and macroeconomic news. Early in 2019, the US witnessed its longest Government shutdown, lasting 35 days, while protracted Brexit negotiations resulted in the resignation of Prime Minister Theresa May followed by a snap general election. Other factors included a deterioration in the relationship between Russia and the US, protracted conflict in Syria, rising tensions between Iran and the US, the US's trade war with China and a presidential crisis in Venezuela. From a macroeconomic perspective, interest rates continued to track lower, while the US Federal Reserve Bank became increasingly dovish, cutting rates three times over the course of the year with the European Central Bank resuming quantitative easing measures. Together, these factors helped gold to regain its status as a hedge against uncertainty and a tool for portfolio diversification.

What were the key demand trends in 2019?

Broadly speaking, global gold demand did not change materially, decreasing a modest 1% to c.140.0Moz (2018: c.141.5Moz), as increased investment demand into Exchange Trade Funds ("ETF") was balanced by weaker bar and coin and jewellery demand.

Global jewellery demand declined 6% to 67.7Moz, driven by lacklustre demand in the world's two largest markets, India and China which collectively accounted for 56% of global jewellery demand. China's jewellery demand retreated 7% on the back of a slowing domestic economy, rising inflation, higher gold prices and the China-US trade dispute. India's experience was similar, with year-on-year jewellery demand falling 9% as it was affected by higher gold prices and weaker economic sentiment. By contrast, demand in the world's third largest consumer, the US, increased 2% to reach a 10 year high of 4.2Moz, underpinned by strong consumer confidence and a robust economic environment.

Investment demand is the second largest source of demand after jewellery and includes bars, coins and ETFs. Overall, investment demand increased 9% to 40.9Moz thanks to a rise in ETF holdings which more than offset a decline in physical gold, with retail investment tumbling to a decade low leading to demand for bars falling by 25% to 18.6Moz and demand for coins falling by 8% to 9.3Moz.

On a combined basis, China (6.8Moz) and India (4.7Moz) accounted for 41% of physical bar and coin demand in 2019. Both countries witnessed a sharp decline in demand due to higher gold prices (especially in local currency terms) as well as pressure from weaker economies (China's GDP growth slowed to the lowest in 27 years). As a result, China's total bar and coin demand declined 31% while India's fell 10%. The weakness was not confined to China and India only, with Asia, the Middle East and much of the West also declining. Only Turkey, South Korea and Canada recorded positive year-on-year growth in physical bar and coin demand.

With gold rallying to a six-year high in US\$ terms and hitting record levels in many local currencies, the behaviour of retail and institutional investors diverged somewhat. Retail bar and coin investors typically looked to capitalise on a rising gold price by selling their holdings, while institutional investors took the opportunity to increase their holdings via ETFs.

According to data compiled by UBS, global ETFs increased by 14% to 86.8Moz, which is roughly the equivalent of US\$130 billion based on the year end gold price. North American ETFs accounted for around 50% of total global holdings with the world's largest ETF, the SPDR Gold Shares ETF, reportedly holding 28.7Moz at the year end.

In terms of official sector demand, central bank purchases totalled 20.9Moz in 2019, 1% lower year-on-year, but representing the tenth consecutive year of net purchases and the second highest level in value terms after 2018. Most Central Banks became net purchasers following the 2008 global financial crisis and have continued to add to reserves, driven by heightened economic and geopolitical uncertainty and unconventional monetary policies.

As in previous years, much of the material demand came from emerging markets as their Central Banks sought to diversify reserve holdings. Russia (5.2Moz purchased), Turkey (5.2Moz purchased), China (3.2Moz

purchased), Kazakhstan (1.2Moz purchased) and India (1.2Moz purchased) all added to existing holdings.

What were the key takeaways in terms of gold supply in 2019?

Total gold supply increased 2% to 153.6Moz, driven mainly by an 11% increase in recycled gold, which totalled 41.9Moz, with higher gold prices stimulating supply. This is not unusual in a rising gold price environment, especially considering that some prices in local currencies have increased beyond previous record highs.

Mine production decreased 1% to 111.4Moz, although it is worth noting that this was the second highest year of production in the last decade, with Russia, Australia, Turkey and West Africa all making notable gains. In contrast the world's largest producer, China, experienced its third consecutive year of decline with output affected by stricter environmental controls and the scaling down and closure of some smaller-scale operations. Industrial action in South Africa and Mexico, as well as lower grades from Grasberg (one of the world's biggest gold mines, located in Indonesia), also weighed on total output.

How has gold performed so far in 2020?

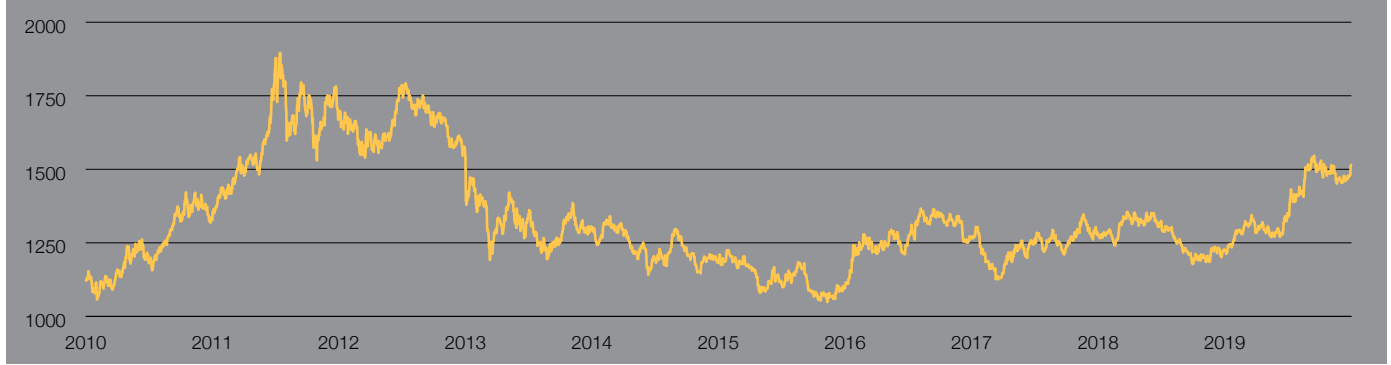
During the first four months of 2020, gold appreciated by +12%, beating silver (-16%), platinum (-20%) and palladium (+1%). With COVID-19 materially impacting markets and economies on a global scale, gold initially performed in a similar fashion to the 2008 financial crisis, initially falling in tandem with the stock market crash, as funds that held gold via futures and ETFs were forced to sell their holdings to meet margin calls, raise cash and buy government bonds. This resulted in the gold price temporarily dipping below the psychologically important US\$1,500/oz level around mid-March. However; following this initial selloff, gold proceeded to rebound to over US\$1,700/oz (US\$1,742/oz on 14 April), a price last seen in Q4 2012, suggesting that gold's status as a wealth preservation and diversification tool remains intact as the remainder of the year will likely depend on a range of factors, including the path of inflation, interest rates, US\$ strength, stock market performance, geopolitical risk, consumer confidence and the impact of the COVID-19 pandemic.

The average annual gold price increased by 10% in 2019 to US\$1,392/oz (in US\$/oz)

2019	1,392
2018	1,268
2017	1,257
2016	1,248
2015	1,160
2014	1,265
2013	1,410
2012	1,668
2011	1,570
2010	1,224

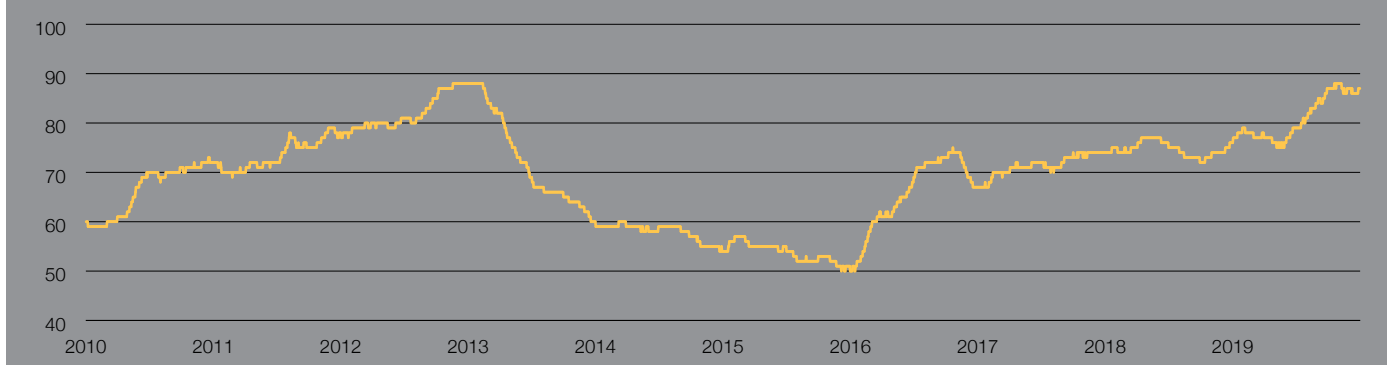
Source: The London Gold Market Fixing Limited. Data provided for information purposes only.

Gold appreciated by 18% in 2019 (in US\$/oz)



Source: The London Gold Market Fixing Limited. Data provided for information purposes only.

Gold ETFs added 10.4Moz (+14%) to their total holdings in 2019



Source: UBS

The Group's strategy is to create superior value for shareholders through six fundamental objectives

Maintain and expand reserves and resources

The Group's strategy is to grow and maintain its resources and reserves through exploration and/or small-scale acquisition of low-cost reserves and resources. Given the lack of refractory processing capacity in Russia, many quality refractory orebodies remain underexplored and licences are more readily available. Given many of these orebodies are already known, discovery costs are lower which makes them potentially interesting targets for non-organic growth. In implementing this strategy, the Group acquired two licences in February 2020 covering the promising early-stage Mariinskiy project located c.30km east from Malomir. The Group's internal exploration programme also focuses on good quality refractory gold ores since this has the potential to unlock significant value.

The Group's short-term reserve and resource replacement strategy includes:

- Near mine exploration, targeting further non-refractory reserves, including underground, to maximise plant utilisation and extend the useful life of the remaining non-refractory processing facilities;
- Exploration in the vicinity of Malomir and Pioneer, targeting high quality refractory reserves to maximise returns from the POX Hub; and
- Early stage exploration at the Group's various development and greenfield projects, including: Tokur, Mariinskiy and two located in Khabarovsk.

The Group's longer-term reserves and resources replacement strategy is focused on:

- A programme of active exploration prioritising the most attractive refractory targets within the Group's own development projects;
- Exploration aimed at defining underground reserve and resources at Albyn and its satellites, and to identify further underground targets in the Pioneer and Malomir areas; and
- Potential further licence acquisitions close to existing Group infrastructure.

Unlock the value creation potential of the POX Hub

Our short-term strategy is focused on maximising utilisation of the POX Hub's capacity by increasing the supply of concentrates from our own mines and third parties. At our own mines, construction of a new flotation plant is underway at Pioneer which will double the Group's own flotation capacity from 3.6Mtpa to 7.2Mtpa once operational in Q4 2020.

The Company is also undertaking a feasibility study into expanding the capacity of the flotation plant at Malomir by investing in a third production line. Subject to funding and Board approval, this line could come on stream in 2022 and increase total own Group flotation capacity to 9.0Mtpa.

Starting in July 2019, the POX Hub began treating third-party concentrates from multiple sources with recoveries quickly reaching and exceeding the design rate. The Company plans to increase treatment of third-party materials to between 130kt to 145kt in 2020 depending on availability.

In the longer term, the Company is investigating the prospect of acquiring further licences in the underexplored Mongolo-Okhotskiy mineralised belt which hosts several well-known deposits, including the Taseevskoye and world-class Sukhoi Log deposits. As part of this initiative, two exploration licences covering the Mariinskiy project lying 30km to the east of Malomir were acquired at state auction in February 2020. The Company is also considering the resumption of exploration work on the Tokur project, including its satellite Osipkan. There is strong geological evidence to suggest that both Mariinskiy and Tokur may contain significant refractory gold resources which are higher quality than both Malomir and Pioneer.

Given that the POX Hub's capacity can be increased by 50%, our long-term strategy is to consider a range of opportunities; including greenfield projects to potentially acquiring producing or advanced-stage assets.

Optimise costs and operational efficiencies

The Group continually strives to strengthen its cash flows by optimising costs and improving operational efficiencies at both existing and future operations. In this respect, the Company has a strong track record of using its unique R&D capabilities to enhance gold processing techniques and to optimise gold recoveries.

At its mines, the Company is currently focused on optimising the stripping of refractory ore bodies in order to fast-track access to higher quality reserves, whilst maintaining ore supply to the processing plants through careful production scheduling and use of existing stockpiles. The Company's team of scientists and engineers continue to seek ways to increase throughput at Malomir by improving the utilisation of crushing and flotation circuits. These modifications will also be implemented at the Pioneer flotation circuit once commissioned later in 2020.

Other project cost initiatives include:

- The installation of pumps which will enable single autoclaves to undergo scheduled maintenance while optimising the use of oxygen in the remaining three autoclaves;
- Test work and research to determine optimal concentrate blends to improve gold recovery while minimising oxygen consumption (which is a significant cost to the pressure oxidation process);
- A feasibility study into thermal pre-treatment of double refractory concentrates with a view to improving recovery by up to 5%; and
- An updated feasibility study into expanding the Malomir flotation plant has focused on ways of reducing CAPEX from the original study.

Strengthen the balance sheet and increase liquidity

Management continually looks for ways to de-risk the Group's balance sheet, including focusing on improving cash flow generation and an optimal capital structure. In 2019 and the early part of 2020, the Company undertook several initiatives aimed at strengthening its financial position, including: (i) a restructuring of IRC's debt facilities, which are guaranteed by the Company, to a more favourable repayment schedule; (ii) a restructuring of the Company's US\$100 million convertible bonds due on 18 March 2020 which were retired early and replaced with US\$125 million convertible bonds due in July 2024; (iii) entering into a non-binding preliminary agreement with Stocken Board AG to remove the IRC debt guarantees and dispose of most of its equity holding in IRC; and (iv) providing shareholders with the option of using equity to fund the purchase of 25% of TEMI LLC. At the time of writing, these initiatives were met with an upgraded rating by Fitch in August 2019 and an upgraded outlook by S&P Global Ratings in October 2019.

The Board has maintained its strategic objective of reducing Net debt / EBITDA as a Group priority, which has been facilitated by the strength in the gold price and weakness in the Rouble. The team is focussing on several initiatives to reach this target, including: (i) expanding EBITDA by maximising utilisation of the POX Hub's capacity and implementing cost optimisation and operational efficiency measures; and (ii) reducing Net debt by prioritising the build-up of free cash flow on the balance sheet. The Company aims to implement an appropriate capital allocation policy in line with the Company's goal to balance between deleveraging, capital investment and return to shareholders.

Management, together with external advisers, are also continually monitoring low or zero cost hedging options to fix the gold price and ensure that the Company will continue to meet its interest payment obligations in the event of a deterioration in gold prices.

Continuously improve sustainability practices

The health and safety of our workforce is a top priority for the Board and management. The Group is focused on the continual improvement of health and safety performance, by minimising the risk of accidents and occupational illnesses, and is committed to achieving a zero-harm working environment.

Risk management strategies are implemented based on valid data and sound science to reduce Lost Time Injury Frequency Rates (LTIFRs). Safety performance is carefully monitored at all levels of the business, with ultimate oversight by the Board of Directors. We aim to develop a safety culture within the Group, which is founded on behavioural based safety.

We continually review, update and look for ways of enhancing opportunities for open dialogue with our local communities, which include consultations and social impact assessments at our operations. We are cognisant of the socio-economic impact we can make within the Amur region and have various tools in place to enable us to provide support and assistance, including the prioritisation of local recruitment and procurement, the Petropavlovsk Foundation and the provision of local infrastructure.

We are committed to respecting our environment which means preventing pollution wherever possible, minimising waste, increasing efficiency, managing and reducing greenhouse gas emissions and optimising natural resource usage and developing innovative solutions to manage and mitigate environmental risks.

The Company is committed to high standards of corporate governance and to applying the Principles of Good Governance set out in the UK Corporate Governance Code. Our strategy is to continuously improve governance by reinforcing key areas such as the management and oversight of audit; finance; risk; health and safety; environmental, community and workforce issues; and to place increasing emphasis on ESG.

Develop and nurture current and potential employees

We regard people as our most valuable asset and believe that investing in our employees delivers long term rewards in the form of a skilled and loyal workforce. We look to encourage the development of our employees by offering a high level of training and ensuring we engage with them in an appropriate way.

Given the remoteness of our operations, we aim to employ local residents wherever possible so that our employees are able to either work from or close to their hometowns. As a result, more than 65% of our employees are residents of the Amur region. In order to ensure we have the appropriate skills and training, many of our employees joined Petropavlovsk after graduating from our Pokrovskiy Mining College where they mastered professions in mining and metallurgy. Since its foundation in 2008, the college has educated more than 10,000 graduates.

As part of ongoing professional training, an average of 62 hours of professional education per employee was carried out in 2019, in fields ranging from analytical chemistry to the pressure oxidation process. The Pokrovskiy Mining College is the only educational institution in the Far East which provides an advanced training programme for engineers on pressure oxidation technology. The programme is aimed at sharing the theory and expertise of our in-house R&D company, RDC Hydrometallurgy, as well as practical skills which are taught using a unique pilot autoclave and computer simulator.

Promoting the success of the Company

The Board acknowledges that there is a legal requirement for the Company to report on how the Board and its Committees have considered the requirements of s.172 of the Companies Act 2006 in their decision making.

A director of a company must act in the way he or she considers, in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole and, in doing so, have regard (amongst other matters) to the following factors:

- The likely consequences of any decision on the long-term;
- The interests of the company's employees;
- The need to foster the company's business relationships with suppliers, customers and others;
- The impact of the company's operations on the community and the environment;
- The desirability of the company maintaining a reputation for high standards of business conduct; and
- The need to act fairly as between members of the company.

The Board is ultimately responsible for the direction, management, performance and long-term sustainable success of the Company. It sets the Group's strategy and objectives, taking into account the interests of all its stakeholders. A good understanding of the Company's stakeholders enables the Board to factor the potential impact of strategic decisions on each stakeholder group into Boardroom discussions. By considering the Company's purpose, vision and values together with its strategic priorities the Board aims to make sure that its decisions are fair.

The Board has always, both collectively and individually, taken decisions for the long term and consistently aim to uphold the highest standards of business conduct. Board resolutions are always determined with reference to the interests of the Company's employees, its business relationships with suppliers and customers, and the impact of its operations on communities and the environment. This statement serves as an overview of how the Directors have performed this duty in 2019 and engaged with the Company's key stakeholders to help to inform the Board's decision-making.

Pages [92](#) to [93](#) of the Sustainable Development section of this Report details the Group's stakeholders and describes how the Board received information about its various stakeholders and the main concerns and issues raised by them in 2019. Throughout this Strategic Report are examples of how the views of the Company's stakeholders are embedded in how the Company does business, guided by its purpose.

The following examples demonstrate how the Board considered and approved matters which support the longer-term success of the Company:

- Refinancing of the Group's US\$100 million 9% Convertible Bonds due March 2020;
- ESG initiatives including Membership of the United Nations Global Compact Initiative; and
- Construction of the flotation plant at Pioneer.

Refinancing of the Group's US\$100 million 9% Convertible Bonds due March 2020

During the year, the Board considered the refinancing of the Group's US\$100 million 9% Convertible Bonds due March 2020 (the 'US\$100 million Bonds').

The refinancing consisted of the placement of Petropavlovsk 2016 Limited US\$125 million 8.25% Convertible Bonds due 2024 to repay the US\$100 million Bonds (the 'Refinancing'). The Board considered that the financial advantage accruing to the Company as a result of the Refinancing would promote the growth and financial prosperity of the Company and the Group as a whole.

The Refinancing benefitted bondholders, shareholders and employees by de-risking the Group's balance sheet. The Refinancing also contributed to Fitch Ratings upgrading the Group's Long-Term Issuer Default Rating and senior unsecured rating to 'B-' from 'CCC' with a Positive Outlook. This is expected to reduce the Group's future cost of debt.

In addition, funds raised from the placement of the new US\$125 million convertible bonds were used to advance construction of a flotation facility at the Pioneer mine, enabling the Group to grow its production of refractory gold, benefitting the Group's employees, Shareholders and securing the long-term future of the Pioneer mine which has abundant reserves of refractory gold ores.

ESG Initiatives

As a mining company, and one of the principal employers in the Amur region, the Board understands that its wide range of stakeholders is integral to the sustainability of the Group's business, underpinning its social licence to operate. In addition, the Board is conscious that expectations around the Company's performance and contribution to society are diverse and evolving.

Stakeholder considerations are integral to discussions at Board and Committee meetings. The Board recognises that its operations have an impact on the local community in which the Group has its mining operations.

The Board (through its Safety, Sustainability & Workforce Committee) approved the following matters, which were endorsed by the Board:

- Petropavlovsk joined the United Nations Global Compact initiative. The UN Global Compact is a call to companies to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environmental management and anti-corruption and to implement actions in support of UN goals and the issues embodied in the associated Sustainable Development Goals. Petropavlovsk is proud to join thousands of other companies globally who are all committed to responsible business decision-making in pursuit of a better and more sustainable world;
- A Grievance mechanism has been launched to enable any member of public or stakeholder to confidentially raise complaints or issues concerning Petropavlovsk's activities and to be assured that they will be carefully assessed and that a written response will be provided; and
- The development of an Environmental, Social and Governance programme which will contain a set of ambitious short and long-term targets designed to enhance Petropavlovsk's sustainability policies, and practices.

Acceleration of the construction of the flotation plant at Pioneer

During the year the Board approved construction of the flotation plant at Pioneer. This will enable the Group to process refractory and transition ore. It is a strategically important aspect of the Group's development and its future position in the gold mining industry.

Together with considering the key financial data of the project the Board considered non-financial matters. A decision not to construct the flotation plant would potentially lead to the closure of the Pioneer RIP plant. This would ultimately result in job losses and consequent social issues within the local community.

Further examples of the Board's deliberations during the year and how the Board took account of stakeholders are provided on pages [128](#) to [183](#) of the Governance Section of this Report.

Introduction to Risk Management during 2019

The Board believes that risk management brings many benefits to Petropavlovsk's operations. Identification and management of risk are central to its delivery of strategic goals because they reduce unexpected productivity shortfalls and limit unbudgeted costs. Risk management also provides a framework for balancing risk against strategic returns by enabling management to quantify the level of risk deemed acceptable for a given economic return. Effective risk management can also create opportunities because the learned experiences of the past improve resilience and protection going forward and therefore can help maximise returns for acceptable levels of risk.

During 2019, the Board considered the Group's risks and its mechanisms and processes for handling these risks. The Group risks were monitored by the Board, with the exception of (i) financial risks which were in the first instance monitored by the Audit Committee and (ii) health, safety and environmental ('HSE') risks which were in the first instance monitored by the Safety, Sustainability & Workforce Committee ('SS&W'). The Audit and SS&W Committees reported any material risks within these areas to the Board which considered these risks and monitored the mitigating actions being taken to address and monitor these risks. The risk management system aims to ensure that the Board's attention is focused on those risks with the highest potential impact.

During 2019, members of the Executive Committee had responsibility for evaluating risks in terms of potential impact and financial cost, with reference to the Group's strategy and the operating environment.

Responsibility for each risk category was delegated to a member of the Executive Committee (a 'Risk Owner'). Each Risk Owner is responsible for:

- Identifying risks in their risk area;
- Assessing the likelihood of occurrence and potential impact on the Group of each risk; and
- The implementation of mitigating controls and action plans which seek to remove or minimise the likelihood and impact of the risks before they occur.

The Board recognises that some risks by their nature cannot be mitigated by the Company.

A diagram detailing the Group's Risk Management Framework is provided on [page 29](#).

Principal risks relating to the Group

A table summarising Principal Risks is provided below, followed on pages [30](#) to [41](#) by further information on the potential impact of each specific risk and mitigating measures in place.

The risks set out below should not be regarded as a complete or comprehensive list of all potential risks and uncertainties facing the Group which could have an adverse impact on its performance. Additional risks which are currently believed to be immaterial could turn out to be material and significantly affect the Group's business and financial results.

Details of the Group's internal control systems which support this risk management system are outlined on [page 154](#).

Risk Management Framework going forward

The Board believes that managing risks effectively across different disciplines requires a consistent and integrated methodology to deliver the balanced assessment needed by management to identify the primary source of risk and area of impact. Both are essential for effective management and governance.

In December 2019, the Board undertook a review of the Group's risk management framework. This review was led, on behalf of the Board, by Mr Damien Hackett, Independent Non-Executive Director. This culminated in the constitution of a new Risk Committee (the 'Committee') on 4 February 2020. The Risk Committee is chaired by Mr Hackett. Other members of the Committee are Mr James Cameron and Mrs Katia Ray, Independent Non-Executive Directors and Mr Dmitrii Chekashkin, Group Executive, Business Transformation and Operational Efficiency. Mr Chekashkin is a member of the Group's Executive and Operational Committees. Mr Martin Smith, the Group's former Deputy CEO, acts as an adviser to the Committee. Terms of Reference of the Committee are available on the Company's website at www.petropavlovsk.net.

The first task of the Committee is to review the Group's risk management framework and recommend any changes to the Board. The Committee proposes that the new framework will include both a top-down and bottom-up approach. It is proposed that the Operational Committee will continue to play a pivotal role in the new framework. The Board will remain responsible for determining the Group's risk appetite.

The Committee has proposed the introduction of a basic, 3-way integrated framework to identify, assess and manage risk.



Further details of the new Risk Management framework and its implementation will be provided in the 2020 Annual Report.

Changes from risks identified in the 2018 Annual Report

During 2019 the most critical risks to the Group related to:

- (i) The ramping up of the POX Hub; and
- (ii) The refinancing of the Group's US\$100 million 9% Convertible Bonds due March 2020.

At the date of this report the Board is pleased to note:

- (i) The successful ramping up of the POX Hub. This is covered in detail on pages [50](#) to [57](#); and
- (ii) The placement, in June 2019, of US\$125 million 8.25% new convertible bonds (the 'New Bonds') to refinance the US\$100 million 9% Convertible Bonds due March 2020. The additional proceeds from the issue of the New Bonds were used to advance the construction of a new flotation facility at the Pioneer mine, enabling the Group to grow production by unlocking the value embedded in the Group's refractory reserves via the POX Hub.

New risks

The Board considers and is conscious of new risks and ensures that mitigating actions are taken as appropriate.

COVID-19

At the date of this report, there is an unprecedented global situation due to the COVID-19 pandemic which is impacting on businesses worldwide. This poses the most significant current risk to Petropavlovsk's employees and operations.

Petropavlovsk's highest priority is to protect its workforce and the local communities in the Amur region in which it operates. The Group has undertaken risk mitigation strategies which are focused on protecting its staff and are in line with published governmental guidance. This has included the formation of an emergency response team, should this be needed, to limit the spread of COVID-19 at Group companies.

There are currently no disruptions to any of the Group's supply chains or logistics and business operations continue as normal. However, the situation is evolving and dynamic. The executive team and the Board continually monitor the situation. Consequently COVID-19 has been included as a new risk.

Further information on measures taken by the Company is provided on [page 6](#).

Brexit

The UK ceased to be a member of the European Union at 23:00 GMT on 31 January 2020. The transition period which began immediately is due to end on 31 December 2020. Given the guidance provided by the Financial Reporting Council, the Board has again considered whether this presents any risk to the Company. The Board has concluded that there are no obvious, company-specific risks to Petropavlovsk's operations or financial results arising directly from the transition period ending on 31 December 2020.

Hydrotechnical Storage Facilities

Following the widely reported tailings dam failures in Brazil in January 2019, the SS&W Committee received a detailed paper on the management of the Group's hydrotechnical storage facilities (HSF). The Group uses a downstream method of construction for HSF. In addition, there are no villages or people living in the path of the Group's facilities in the highly unlikely event of any failures. The Group's HSF are insured, operated and monitored in accordance with the legislation of the Russian Federation. Examinations and monitoring are performed daily and, as a result, the risk is considered low.

The Executive Committee and the Board continue to monitor emerging risks.

Risks to Our Performance



Increased risk



No change



Decreased risk



New risk

Principal Risks and Mitigation

Table Summarising Principal Risks

Risks	Significant factors: 2019 and 2020 to date	Overall change in risk from prior year
Impact of COVID-19 on the Group's employees and its operations.	The Group has implemented risk mitigation strategies which are focused on protecting the Group's employees and operations and the local community within which the Group operates. Further information is provided on page 6 .	N
Operational a) Production Related – Weather – Delivery of equipment b) Exploration	Heavy rainfall impacted underground development works at Malomir during 2019. The situation was well managed with no material impact on the Group's 2019 production.	↑
Processing – Mechanical failure of POX Hub – Failure to reach expected recovery – Significant levels of gold loss from pregnant solution (preg robbing)	Successful ramping-up of the POX Hub: – The POX Hub exceeded the Group's most optimistic expectations, with 193.2koz of gold recovered from refractory concentrates during its first 12 months of operation; – Gold recoveries from Malomir concentrates increased steadily at the POX plant through the year; – Productivity and utilisation-hours for key equipment items exceeded design rate; and – All four autoclaves are fully operational achieving design hourly throughput capacity.	↓
Financial – Lack of funding and liquidity – Gold price – Exchange rate – Guarantee of IRC's debt	– Successful liability management: Refinancing of the Group's 9% Convertible Bonds due March 2020 by the placement of US\$125 million 8.25% Convertible Bonds due 2024; – An 18% increase in the gold price during 2019 reaching a six year-high, ending 2019 at US\$1,515/oz; – Increased financial stability for IRC due to the Gazprombank refinancing; and – Potential disposal of a c.29.9% shareholding in IRC Limited, subject to certain conditions being met, including the release of the Group's obligation to guarantee IRC's loan facilities with Gazprombank.	↓
Health, Safety & Environmental – POX – Underground mining – Contamination	– The Group reduced its Lost-Time Injury Frequency Rate by c.36% in 2019 compared with 2018; – The Company joined the United Nations Global Compact Initiative. This is a further step on the Group's roadmap to implementing international best practices across all areas of sustainable development; and – Significant improvements were made in ESG Key Performance Indicators.	→
Country/Compliance – The Group requires various licences and permits in order to operate – Russian sovereign risk	The Board will continue to monitor these issues.	→
Loss of Key Personnel – The Company is dependent on Dr Maslovskiy and other long-serving members of the senior executive team.	– The Executive Committee was strengthened with the appointment of Mr Dmitrii Chekashkin, Group Executive, Business Transformation and Operational Efficiency; and Mr Danila Kotlyarov as Chief Financial Officer and Executive Director; and – A revised Remuneration Policy is being proposed to shareholders for approval at the 2020 Annual General Meeting.	↓

Risk management framework as at 31 December 2019

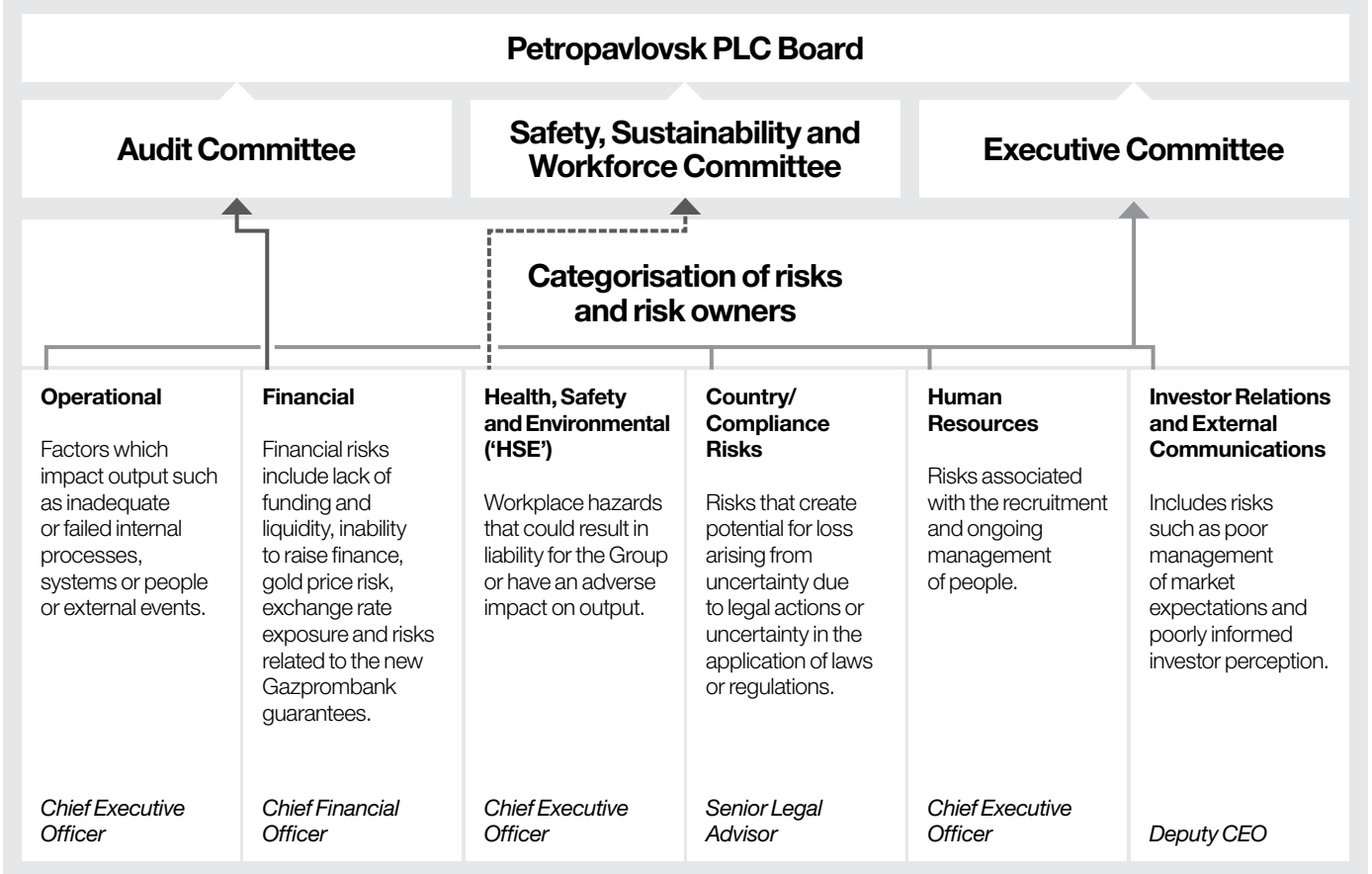




Table of principal risks

Operational risks		
Risk	Description and potential impact	Potential impact/ Change since 2018
PRODUCTION RELATED RISK – Failure to achieve the Group’s production plan		
Risk to the Group’s employees and operations from COVID-19	The global COVID-19 pandemic could significantly impact on the Group’s employees and could result in the suspension of some or all, of the Group’s mining operations.	High 
Risk to production from: (i) Weather (ii) Delivery of equipment	<p>The Group’s assets are located in the Russian Far East, a remote area that can be subject to severe climatic conditions. Severe weather conditions, such as cold temperatures in winter and torrential rain, potentially causing flooding in the region could have an adverse impact on operations, including the delivery of supplies, equipment and fuel. Exploration and extraction levels may fall as a result.</p> <p>The Group relies on the supply and availability of various services and equipment in order to successfully run its operations. Delay in the delivery or the failure of mining equipment could significantly delay production and impact the Group’s profitability.</p> <p>The Group is dependent on production from its operating mines (both open pits and underground) and from the POX plant in order to generate revenue and cash flow.</p>	High 

The symbols indicate how the Company considers that these risks have changed since 2018.



Increased risk



No change



Decreased risk



New risk

Mitigation/comments/ 2019 Progress

Additional information

The Group has implemented measures in each of the jurisdictions in which it operates, in line with published guidance, in order to protect employees and the Group's operations.

Additional actions taken by the Group have included:

- The formation of an emergency response team to limit the spread of COVID-19 at the Group companies. Members of the response team will work in co-operation with the local authorities when and if required. The team includes representatives from each Group enterprise in Russia; and
- Coordinators responsible for the control and counteraction against the spread of COVID-19 have been appointed at each location.

Preventative maintenance procedures are undertaken on a regular basis to ensure that machines will function properly under extreme cold weather conditions; heating plants at operational bases are regularly maintained and operational equipment is fitted with cold weather options which could assist in ensuring that equipment does not fail as a result of adverse weather conditions. Pumping systems are in place and tested periodically to ensure that they are functioning.

Operational Performance [page 42](#)

Management monitor natural conditions in order to pre-empt any disaster and in order that appropriate mitigating action can be taken. The Group aims to maintain several months of essential supplies at each site. Equipment is ordered with adequate lead time in order to prevent delays in delivery.



The Group has contingency plans in place to address any disruption to services.

2019

In July 2019, the Company announced that heavy rainfall had impacted underground development works at Malomir which is in a remote region where heavy rainfall events are not uncommon during the summer months. The Company is well equipped to deal with such issues as they arise including employee welfare and safety. The situation was well managed. Malomir produced 180.3koz of gold doré in 2019, including from concentrate, compared with 77.6koz in 2018.

Risks to Our Performance continued

Operational risks (continued)

Risk	Description and potential impact	Potential impact/ Change since 2018
EXPLORATION RELATED RISK		
<p>The Group's activities are reliant on the quantity and quality of the Mineral Resources and Ore Reserves available to it.</p>	<p>Exploration activities are speculative, time-consuming and can be unproductive. In addition, these activities often require substantial expenditure to establish reserves through drilling, metallurgical and other testing, to determine appropriate recovery processes to extract gold from the ore and to construct or expand mining and processing facilities. Once deposits are discovered it can take several years to determine whether reserves exist. During this time, the economic viability of production may change. As a result of these uncertainties, the exploration programmes in which the Group is engaged may not result in the expansion or replacement of the current production with new reserves or operations.</p>	<p>High</p> 
PROCESSING		
<p>The POX Hub, together with the associated flotation plants at Malomir and Pioneer, sits at the heart of Petropavlovsk's strategy and is the principal driver of future value for the Group.</p> <p>A mechanical or metallurgical failure of the POX Hub, including failure to reach expected recovery rate or high levels of 'preg robbing' could result in lower production and/or higher costs, thus impacting the Group's Strategy.</p>	<p>POX is a new and complex metallurgical facility which brings added challenges.</p> <p>If there is a failure in the POX process it could lead to lower production and/or higher costs which may have a detrimental impact on the Group's operating and financial condition.</p> <p>Radioactive isotopes are used in monitoring the POX process. Failure to use this equipment correctly could result in contamination.</p>	<p>High</p> 

Mitigation/comments/ 2019 Progress**Additional information**

The Group uses core drilling combined with modern geophysical and geochemical exploration and surveying techniques. The Group employs a world-class team of geologists with considerable regional expertise and experience. They are supported by a network of fully accredited laboratories experienced in performing a range of assay work to high standards.

Exploration Update on [page 68](#)

The POX Hub on [page 50](#)

Group Mineral Resource and Ore Reserve estimates are prepared by a team of qualified specialists following the guidelines of JORC Code 2012, which is one of the most recognised reporting codes. Mineral Resource and Ore Reserve estimates are subject to regular independent reviews and audits. The last full audit was completed in April 2017 by Wardell Armstrong International.

In addition, as a part of compliance with The Subsoil Law, the Group also prepares reserve estimates following Russian GKZ guidelines. These estimates are subject to GKZ audits. Where possible, the Group reconciles GKZ and JORC estimates which provides additional assurance about the Company's Reserve estimates.

The Group employs a team of qualified mining engineers to undertake mine planning, detailed open pit and underground mine design and production scheduling.

The successful commissioning of the POX Hub unlocked the economic potential of the Group's 12.99Moz refractory resources which support the Group's long-term growth objectives. The Group continues to explore the potential for further mine life extension and production expansion and has identified several prospective satellite refractory targets at Malomir and Pioneer.

In February 2020, the Group acquired exploration assets at Mariinskiy comprising two adjacent exploration licences. Our exploration geologists believe these assets have the potential to contain substantial gold resources, of a similar scale and to known orebodies at Malomir including its satellites.

The smooth ramp-up of the POX Hub in 2019 is a record for the industry. The POX Hub exceeded the Group's most optimistic expectations, with 193.2koz of gold recovered from refractory concentrates during its first 12 months of operations. Of this amount, 132.0koz came from concentrates produced at Malomir, leading to an increase of 132% in gold produced at Malomir compared to a year ago.




The POX Hub on [page 50](#)

Gold recoveries from Malomir concentrates increased steadily at the POX plant through 2019 to reach above design during the fourth quarter. Productivity and capacity utilisation for key equipment exceeded design rate and all four autoclaves have tested at stable, full capacity.

The Group's expertise in pressure oxidation is guided by RDC Hydrometallurgy, a scientific research centre based in St Petersburg with a POX pilot plant located in Blagoveschensk. Using its scientific strengths, RDC is now focussing on ways to process more complex refractory ores.

Stringent safety standards governing licensing and use of nuclear isotopes are second only to the space industry. Employee training for such activity is undertaken at the Novosibirsk Institute for Advanced Studies.

Risks to Our Performance continued

Financial risks		
Risk	Description and potential impact	Potential impact/ Change since 2018
Liquidity	<p>The Group may need ongoing access to liquidity and funding in order to:</p> <ul style="list-style-type: none"> (i) Refinance its existing debt; (ii) Support its existing operations and extend their life and capacity; and (iii) Invest to develop its refractory ore concentrate production, including construction of flotation plants, underground mining projects and exploration. <p>There is a risk that the Group may be unable to obtain the necessary funding when required or that such funding will only be available on unfavourable terms.</p> <p>The Group may therefore be unable to meet its business development objectives or financial commitments.</p>	<p>High</p> 
The Group's result of operations may be affected by changes in the gold price.	<p>The Group's financial performance is highly dependent on the gold price. The gold market is cyclical and sensitive to changes in the economy and numerous factors which are beyond the Group's control.</p> <p>A significant continuous decline in the gold price would negatively affect the Group's profitability and cash flow and consequently its ability to develop its business.</p>	<p>High</p> 
Exchange rate fluctuations	<p>The Company reports its results in US Dollars, which is the currency in which gold is principally traded and therefore in which most of the Group's revenues are generated. Significant costs are incurred in and/or influenced by the local currencies in which the Group operates, principally Russian Roubles. An appreciation of the Russian Rouble against the US Dollar tends to result in an increase in the Group's costs relative to its revenues whereas the depreciation of the Russian Rouble against the US Dollar tends to result in lower Group costs relative to its revenues.</p> <p>In addition:</p> <ul style="list-style-type: none"> – A portion of the Group corporate overhead is denominated in Sterling. Therefore, adverse exchange rate movements may materially affect the Group's financial condition and results of operations; and – If inflation in Russia were to increase without a corresponding devaluation of the Russian Rouble relative to the US Dollar, the Group's business, results of operations and financial condition may be adversely affected. 	<p>High</p> 

Mitigation/comments/ 2019 Progress**Additional information**

In the event that the Group requires additional finance for shorter term liquidity purposes, including for capital expenditure purposes, the Group may access forward gold sales funding. This may be advantageous, depending upon the Group's access or otherwise to debt or equity finance and the terms on which these may be available. No forward contracts to sell gold were outstanding as at 31 December 2019 (31 December 2018: 200,000 ounces of gold at an average price of US\$1,252/oz). Gold contracts during 2018 and 2019 provided the Group with flexibility during the POX plant ramp up period.

Chief Financial Officer's Statement on [page 72](#)

In June 2019, the Company successfully refinanced the Group's US\$100 million 9% Convertible Bonds due March 2020 by the placement of US\$125 million 8.25% Convertible Bonds due 2024 (the 'New Bonds') significantly de-risking the Group's balance sheet. In addition, funds from the New Bonds have been used to advance construction of a new flotation facility at the Pioneer mine, enabling the Group to grow its production by unlocking the value embedded in its refractory reserves via the Pressure Oxidation (POX) Hub.

In August 2019, Fitch Ratings upgraded the Group's Long-Term Issuer Default Rating and senior unsecured rating to 'B-' from 'CCC' with a Positive Outlook due to 'a significant strengthening in Petropavlovsk's liquidity position due to the refinancing of the convertible bond, repayment of US\$57 million bridge loan by affiliated iron ore producer IRC Limited and the increased visibility for production due to the launch of the POX Hub in November 2018.'

The Chief Financial Officer constantly monitors the gold price and influencing factors and consults with the Board as appropriate.

Market Overview on [page 20](#)

The Group has a hedging policy and hedges a portion of production as the Chief Financial Officer and Board deem necessary. As at 31 December 2019 the Group was unhedged.



Chief Financial Officer's Statement on [page 72](#)

The average year-on-year depreciation of the Russian Rouble against the US Dollar was approximately 3.2%, with the average exchange rate for 2019 being RUB64.69 : US\$1 compared to RUB62.68 : US\$1 for 2018.

The Group's policy is to keep under review possible options for exchange rate hedging.

Risks to Our Performance continued

Financial risks (continued)

Risk	Description and potential impact	Potential impact/ Change since 2018
<p>Risk that:</p> <ul style="list-style-type: none"> – funding may be demanded from Petropavlovsk under a guarantee provided in relation to a project finance facility provided to K&S, a wholly owned subsidiary of IRC. – K&S will not be able to service the interest and meet the repayments due on its loan due to insufficient funds arising from a decrease in the iron ore price or operational issues at the K&S site. 	<p>As at 1 January 2019, Petropavlovsk had provided a guarantee against a US\$340 million project loan facility provided to K&S by ICBC to fund the construction of IRC's iron ore mining operation at K&S, of which c.US\$169 million was outstanding as at 1 January 2019.</p> <p>In the event that K&S defaulted on its loan, Petropavlovsk may have been liable to repayment of the outstanding loan under the terms of the guarantee and other Group indebtedness may have become repayable under cross-default provisions.</p> <p>Due to actions taken by IRC and the Company during 2019 (see Mitigation/Comments) this risk has substantially reduced.</p>	<p>High</p> 
<p>Risk that further issues delaying the ramping up of the K&S facility and/or a decrease in the iron ore price could result in a decrease in the value of the Group's shareholding in IRC.</p>	<p>Due to the guarantees provided by the Company to Gazprombank, the Group's going concern status remains sensitive to IRC's ability to comply with covenants within the new facilities and generate sufficient cash flows from its K&S mine.</p>	<p>High</p> 

Mitigation/comments/ 2019 Progress

- On 18 December 2018, K&S signed two new broadly identical facility agreements with Gazprombank (the 'Facility Agreements') whereby Gazprombank would provide K&S with a US\$240 million facility for the purposes of repaying in full the outstanding project finance facility K&S had with ICBC and repaying the two bridge loans provided by Petropavlovsk to IRC (the 'Gazprombank Facility').
- Pursuant to the Facility Agreements, Petropavlovsk was to guarantee the obligations of K&S up to an initial amount of US\$160 million through a series of five guarantees over the life of the Gazprombank Facility. These guarantees were entered into by the Company and Gazprombank on 15 February 2019, with the effectiveness of each of the guarantees being conditional upon shareholder approval being obtained at a General Meeting. Such shareholder approval was obtained on 12 March 2019.
- The Gazprombank Facility has been fully drawn down and has enabled IRC to:
 - Repay in full the sum of approximately US\$169 million outstanding under the ICBC Facility;
 - Repay Petropavlovsk the Rouble equivalent of approximately US\$57 million, in addition to any accrued interest and fees, as full repayment of the two bridge loans; and
 - Pay Petropavlovsk approximately US\$6 million in fees owed by K&S and IRC to Petropavlovsk in respect of the guarantee provided under the ICBC Facility.
- The risk of K&S defaulting on its loan, and hence the risk that Petropavlovsk may be liable to repay the outstanding loan, has been reduced by K&S entering into the Gazprombank Facility and repaying the ICBC Facility because:
 - The Gazprombank Facility provides for a significantly more relaxed amortisation schedule compared to that under the ICBC Facility; and
 - It better aligns with the proposed ramp up of K&S and the revenues that are anticipated to be generated by it.
- The guarantee provided by the Company has decreased to US\$160 million as at the date of this Annual Report. However, in certain circumstances the Company could have a maximum liability of the full amount outstanding to Gazprombank by K&S. As at 31 December 2019, the Group has guaranteed the outstanding amounts IRC owed to Gazprombank. The outstanding loan principal was US\$225 million as at 31 December 2019.

Preliminary Agreement for the Proposed Termination of IRC Guarantees and the Disposal of 29.9% of the Company's interest in IRC

On 18 March 2020, the Company entered into a preliminary agreement with Stocken Board AG, setting out the non-binding terms on which Petropavlovsk would sell to Stocken a 29.9% shareholding in IRC Limited, subject to certain conditions precedent being met, including the release of the Group's obligation to guarantee IRC's loan facilities with Gazprombank.

IRC announced its 2019 full year results on 27 March 2020. This confirmed that K&S had operated at 81% of capacity during 2019 whilst it was currently operating at c.95%. However, the IRC Board noted the potential negative impact of COVID-19 on IRC's performance.

Additional information



IRC on [page 69](#)

Audit Committee Report on [page 146](#)

The Company's Circular to Shareholders dated 15 February 2019, is available at www.petropavlovsk.net

Risks to Our Performance continued

Health, Safety and Environmental risks

Risk	Description and potential impact	Potential impact/ Change since 2018
<p>The Group operates potentially hazardous sites such as the POX Hub, open pits, underground mines, exploration sites, processing facilities and explosive storage facilities. The operation of these sites exposes its personnel to a variety of health and safety risks.</p>	<p>The Group's employees are its most valuable assets. The Group recognises that it has an obligation to protect the health of its employees and that they have the right to operate in a safe working environment. Certain of the Group's operations are carried out under potentially hazardous conditions. Group employees may become exposed to health and safety risks which may lead to work-related accidents and harm to the Group's employees. These could also result in production delays and financial loss.</p>	<p>Medium/High</p> 
<p>Major pollution arising from operations include air and water pollution, land contamination and deforestation.</p>	<p>If the Group was involved in a major environmental event, potential impacts could include fines and penalties, statutory liability for environmental redemption and other financial consequences that might be significant.</p> <p>Accidental spillages of cyanide and other chemicals may result in damage to the environment, personnel and individuals within the local community.</p>	<p>Medium/High</p> 

Mitigation/comments/ 2019 Progress

Health & Safety management systems are in place across the Group to ensure that the operations are managed in accordance with the relevant health and safety regulations and requirements and where possible with international best practice. The Group continually reviews and updates its health and safety procedures in order to minimise the risk of accidents and improve accident response, including additional and enhanced technical measures at all sites, improved first aid response and the provision of further occupational, health and safety training.

Board level oversight of health and safety issues occurs through the work of the Safety, Sustainability and Workforce Committee (SS&W Committee). The Committee is chaired by Mr Harry Kenyon-Slaney, Independent Non-Executive Director, who is assisted by his colleagues on the Committee namely, Dr Pavel Maslovskiy, Chief Executive Officer, Mr Damien Hackett and Mrs Katia Ray, Independent Non-Executive Directors and Dr Alya Samokhvalova, Deputy CEO. Mr Kenyon-Slaney's introduction to the Sustainability Report is provided on [page 89](#) of this Annual Report. Members of the SS&W Committee visited the Group's operating mines in April 2019 and met with members of the workforce and the local community.

Progress during 2019:

- As part of the Company's commitment to environmental, sustainability and governance (ESG) matters, the Company became a member of the UN Global Compact Initiative on corporate sustainability. This requires the Company to align its operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption;
- The Lost-Time Injury Frequency Rate (LTIFR) for 2019 of 1.61 accidents per 1 million man-hours worked represented a c.36% reduction compared to 2018;
- Greenhouse Gas Emissions were reduced from 1.01t CO₂e per ounce of gold in 2018 to 0.88t; and
- The Company recently appointed an experienced Head of Sustainable Business who will assist with the development of the Group in this area.

Health & Safety targets are included in the annual bonus scheme for Executive Directors and the Executive Committee. The Remuneration Committee may also consider the Group's health and safety performance during the year when considering bonus plan payments.

The Company operates a certified environmental management system at all of its sites which meet international standards.

The Company has implemented a number of initiatives to monitor and limit the impact of its operations on the environment.

Cyanide and other dangerous substances are kept in secure storages with access limited to qualified personnel and closely monitored by security staff.



Additional information

Sustainability Report on [page 84](#)


Sustainability Report on [page 84](#)

Risks to Our Performance continued

Country and Compliance risks

Risk	Description and potential impact	Potential impact/ Change since 2018
The Group requires various licences and permits in order to operate.	<p>The Group's principal activity is gold mining which requires licences permitting exploration and mining in specific areas in Russia. These licences are regulated by Russian governmental agencies and if a material licence was challenged or terminated, this would have a material adverse impact on the Group. In addition, various government regulations require the Group to obtain permits to implement new projects or to renew existing permits.</p> <p>Failure to comply with the requirements and terms of these licences may result in the subsequent termination of licences crucial to operations and cause reputational damage. Alternatively, financial or legal sanctions could be imposed on the Group. Failure to secure new licences or renew existing ones could lead to the cessation of mining at the Group's operations or an inability to expand operations.</p>	<p>Medium/High</p> 
The Group is subject to Sovereign Risk.	<p>Actions by governments or changes in economic, political, judicial, administrative, taxation or other regulatory factors or foreign policy in the countries in which the Group operates or holds its major assets could have an adverse impact on the Group's business or its future performance. Most of the Group's assets and operations are based in Russia.</p> <p>Russian foreign investment legislation imposes restrictions on the acquisition by foreign investors of direct or indirect interests in strategic sectors of the Russian economy, including gold reserves in excess of a specified amount or any occurrences of platinum group metals.</p> <p>The Group's Pioneer and Malomir licences have been included on the list of subsoil assets of federal significance, maintained by the Russian Government ("Strategic Assets"). The impact of this classification is that changes to the direct or indirect ownership of these licences may require clearance in accordance with the Foreign Strategic Investment law of the Russian Federation.</p>	<p>Medium/High</p> 

Loss of Key Personnel

Risk	Description and potential impact	Potential impact/ Change since 2018
The Company is dependent on Dr Pavel Maslovskiy, CEO and other long-serving members of the senior executive team.	<p>The loss of key personnel to the Company may impact the morale of senior management, its workforce, the result of the Group's operations and a delay in the delivery of projects.</p>	<p>Medium/High</p> 

Mitigation/comments/ 2019 Progress**Additional information**

There are established processes in place to monitor the required and existing licences and permits on an on-going basis. Processes are also in place to ensure compliance with the requirements of the licences and permits.

To mitigate Russian economic and banking risk the Group strives to use the banking services of several financial institutions and not keep disproportionately large sums on deposit with a single bank.

The Group seeks to mitigate political and legal risk by constant monitoring of proposed and newly adopted legislation in the countries in which it operates and specifically in Russia. It also relies on the advice of external counsel in relation to the interpretation and implementation of new legislation.

The Group closely monitors its assets and the probability of their inclusion into the Strategic Assets lists published by the Russian Government.

The Company's Articles of Association include a provision which allows the Board to impose such restrictions as the Directors may think necessary for the purpose of ensuring that no ordinary shares in the Company are acquired or held or transferred to any person in breach of Russian legislation, including any person having acquired (or who would as a result of any transfer acquire) ordinary shares or an interest in ordinary shares which, together with any other shares in which that person or members of their group is deemed to have an interest for the purposes of the Strategic Asset Laws, carry voting rights, exceeding 50 per cent. (or such lower number as the Board may determine in the context of the Strategic Asset Laws) of the total voting rights attributable to the issued ordinary shares without such acquisition having been approved, where such approval is required, pursuant to the Strategic Asset Laws.

This risk cannot be influenced by the management of the Company. However, the Group continues to monitor changes in the political environment and reviews changes to the relevant legislation, policies and practices.

Mitigation/comments/ 2019 Progress**Additional information**

- During 2019, the Executive Committee has been strengthened by the appointment of Mr Dmitrii Chekashkin, Group Executive, Business Transformation and Operational Efficiency.
- During 2020, Mr Danila Kotlyarov was appointed as Chief Financial Officer and Executive Director, further strengthening the Board and the executive team.
- A revised Remuneration Policy will be proposed to shareholders for approval at the Company's 2020 Annual General Meeting.

Nominations Committee Report on [page 144](#)

Directors' Remuneration Report on [page 156](#)

Operational Performance

Key Performance Indicators

Mineral Resources (Moz)

2019	21.03
2018	20.52
2017	20.86

Definition

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade, and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Relevance

JORC Mineral Resources are a singular measure of the size of the Group's mining and exploration assets, indicating medium to long-term production potential. In line with its Strategy of maintaining and expanding Reserves and Resources, the Group places emphasis on finding Mineral Resources through near mine exploration and is increasingly investigating the potential of other licences further away from its existing operations given the distance that refractory gold ores can be transported (once concentrated) to the POX Hub. By implementing this strategy in recent years, the Group has successfully replenished gold resources depleted by mining.

Progress In 2019

A successful exploration campaign together with the recently improved gold market conditions allowed the Group to increase its Mineral Resources from 20.52 to 21.03Moz despite depletion of c.0.5Moz due to mining.

Exploration completed in 2019 has resulted in increased confidence at Elginskoye (part of the Albyn project) which is the next Group's major open pit mine starting production in 2020. Albyn's Measured and Indicated gold resources increased by c.20% in 2019 vs 2018. Of this increase, refractory ounces increased almost three-fold from 0.57 to 1.55Moz as transitional resources were re-classified as lower risk refractory resources following the successful start-up of the POX Hub.

Improved gold market conditions have led to the use of a higher gold price assumption (US\$1,700/oz vs. US\$1,500/oz) to define Mineral Resources. This, together with favourable results from metallurgical testing, has allowed Pokrovskiy and Pioneer RIP tailings to be classified as Inferred Mineral Resources in accordance with the JORC Code which collectively added c.0.87Moz to the Mineral Resource statement. Pioneer Mineral Resources have increased by c.11%, whilst Pokrovskiy Mineral Resources increased by c.32%. The increase at Pioneer is attributable to both exploration success, including metallurgical testing, and the increase in the gold price assumption, whilst the increase at Pokrovskiy is purely due to a higher gold price assumption as there was no exploration completed at Pokrovskiy during 2019.

Going forward

The Company will continue to develop a high-quality refractory and non-refractory resource pipeline to support both open pit and underground mining and maximise existing Group infrastructure. Specifically, in 2020, Group geologists will seek to delineate new mineral resources at Albyn as well as at Osipkan and Tokur which are in proximity to Malomir. The Company will also seek opportunities to increase its refractory resource base via high-quality low-cost acquisitions.

Our key performance indicators appear throughout this report and introduce the operational, financial and sustainable development sections; respectively pages [42](#), [70](#) and [86](#).

Total gold production (koz)

2019	517
2018	422
2017	440

Definition

Measured in troy ounces, total gold production is made up of gold produced from the Group's hard-rock mines as well as from the processing of material purchased from third parties for the applicable years. Gold production data is comprised of gold recovered each year and adjusted for changes in gold remaining in circuit at the end of the period.

Relevance

Gold production underpins our financial performance, as the majority of the Group's operating profit is attributable to the sale of the gold produced by the Group. The indicator also demonstrates the strength of our operational and managerial teams and ability to deliver against the mine plan.

Performance in 2019

In 2019, the Group produced 517.3koz. Production from the Group's own mines amounted to 471.6koz, in line with guidance given for the year of 450 - 500koz. A further 45.7koz of gold was produced from concentrates purchased from third parties for the processing at Pokrovskiy POX Hub which was the first instance when Group started gold production from third-party sources. Albyn was a strong performer, with production rising c.13% from 2018 due to a combination of increased throughput of higher-grade ore and consistently high recoveries at the RIP plant. Malomir transitioned from being nonrefractory to becoming principally a refractory mine which enabled production volumes to increase 132% via treatment at the POX Hub. The increase at Malomir was also helped by the stronger-than-expected performance at the flotation plant. Pioneer's performance fell c.11% from 2018 as it was impacted by the processing of harder ores plus challenging geotechnical and hydrogeological issues encountered at the start of the year.

Going forward

Total gold production for 2020 is expected to increase and reach a range between 620 and 720koz. Production at Malomir is expected to decline modestly due to a scheduled decline in production from the underground sections of the mine and exhaustion of Quartzitovoye non-refractory open pit. Albyn's production is also expected to be lower on account of a small decrease in plant throughput, head grade and recovery caused by the switch from mining at the Albyn open pit to mining at Elginskoye. The declines at Malomir and Albyn are expected to be partly offset by increased production at Pioneer due to higher head grades and RIP recoveries resulting from a greater contribution of underground ore from NE Bakhmut and the development of an underground mine at Andreevskaya zone. Increase in gold production from third-party concentrates is expected to contribute to total gold production rise to between 620 to 720koz.

Pioneer

Pioneer produced c.23% of total gold production in 2019 from a mix of open pit and underground operations. Since the start of mining in 2008, the mine has focused on extracting non-refractory ores, although the completion of new flotation facilities in 2020 will lead to a transition towards mining predominantly refractory gold ores for processing at the POX Hub. In terms of exploration, the Pioneer project is considered to have significant potential, particularly for refractory gold which has historically been under-explored.

Operating performance

Pioneer produced 120.4koz of gold in 2019, a c.11% decrease from 2018 (135.1koz), caused by mining harder than anticipated ores which negatively affected mill throughput. Non-refractory ore was mined from open pits at Yuzhnaya, Alexandra and Katrin, with additional material provided by stockpiles. Underground development advanced well, with a total of 4,348m (58,478m³) of underground workings completed at North East Bakhmut. In total, 246kt of underground ore with an average gold grade of 4.60g/t were mined from pay shoots 2 and 3, with the mine operating at its design capacity.

No further ore was added to the heap-leach due to its decommissioning, although 2.9koz of gold were recovered from irrigation activities over the course of the year.

Total Cash Costs[♦] increased by 31% to US\$1,040/oz (2018: US\$792/oz) and All-in Sustaining Costs[♦] increased by 15% to US\$1,363/oz (2018: US\$1,190/oz).

Total Cash Costs[♦] were most affected by additional costs associated with the ramp-up of the POX Hub, inflation of certain Rouble denominated costs and application of the full 6% mining tax rate, partly offset by higher grades and recoveries and Rouble depreciation.

All-in Sustaining Costs[♦] reflect the increase in Total Cash Costs[♦], partially offset by the increase in physical ounces sold in 2019 with an aggregate of sustaining exploration and capital expenditures and capitalized stripping expenditure during the period remaining at approximately the same level as in 2018.

Mining and Processing

Pioneer is a bulk tonnage operation comprising multiple open pits and an underground mine. The orebodies contain both non-refractory and refractory gold ores. Non-refractory ore is processed at an all-year 6.7Mtpa RIP plant, although reserves are nearing exhaustion and RIP production is set to decline. Following the launch of the POX Hub, the Group has started construction of a 3.6Mtpa flotation plant which is expected to be operational from Q4 2020.

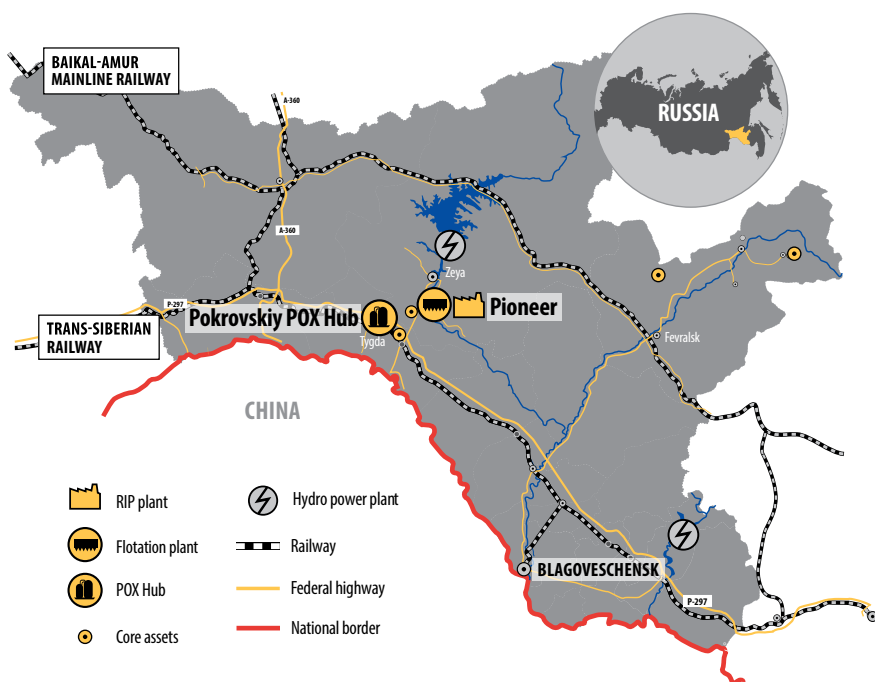
The addition of a flotation plant will enable Pioneer's substantial refractory reserves to be processed by concentrating refractory ore at the mine prior to transporting to the POX Hub for further processing into doré. The flotation plant will utilise two of the c.2.0Mt per annum crushing and grinding lines that are currently dedicated to the RIP circuit. Consequently, non-refractory processing capacity will be reduced to 2.7Mtpa from 6.7Mtpa. Given the harder nature of refractory ore, the combined annual throughput of refractory gold ores through the two milling lines is expected to be less than 4.0Mtpa at around 3.6Mtpa.

Production from the first Pioneer North East Bakhmut underground mine began in 2017 using a reputable Russian mining contractor. Mining at NE Bakhmut is undertaken employing trackless equipment using sub-level open stoping mining method with or without backfill. A second underground mine at Andreevskaya Zone is scheduled for construction during 2020 in addition to the North East Bakhmut underground operation.

Ores amenable heap-leach treatment have now been exhausted and no further heap-leach processing is planned. Heap-leach crushing equipment are used to assist in crushing RIP ore and also to produce ballast for use in construction and maintenance work. The sorption columns are adapted to recover gold-in-circuit from re-circulated RIP tailings solution.

Geology

Gold mineralisation at Pioneer was formed as a result of hydrothermal processes occurring in the late Mesozoic Period near the contact between a granitoid massif and Jurassic country rocks. Pioneer is comprised of five gold licences covering multiple steeply dipping orebodies with a strike length of up to 2km. The orebodies are comprised of high-grade shoots with lower grade halos of mineralisation. High-grade shoots generally have a thickness of between 1 and 20m, while low-grade halos extend up to 200m in thickness. Many of the high-grade shoots remain open at depth, offering the potential for an increase in underground resources. The Group's geologists believe excellent potential exists for the discovery of significant open pit resources.



Pioneer open pit and underground mining operations

	Units	Year ended 31 December 2019	Year ended 31 December 2018
Total material moved	m ³ '000	19,042	18,612
Ore mined	t '000	3,795	3,173
Average grade	g/t	0.97	1.07
Gold content	oz. '000	118.6	108.9

Processing operations

	Units	Year ended 31 December 2019	Year ended 31 December 2018
RIP Plant			
Ore milled	t '000	5,707	6,395
Average grade	g/t	0.78	0.73
Gold content	oz. '000	143.5	150.0
Recovery	%	81.7	80.4
Gold recovered	oz. '000	117.2	120.6
Heap-leach operations			
Total stacked	t '000	–	701
Average grade	g/t	–	0.50
Gold content	oz. '000	–	11.3
Recovery	%	–	50.1
Gold recovered	oz. '000	2.9	5.6
Pioneer gold production – Doré	oz. '000	120.4	135.1

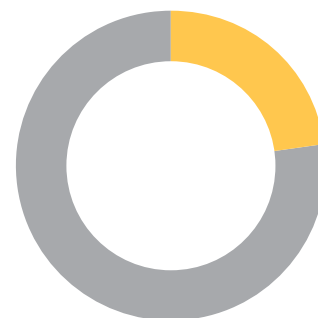
Figures may not add up due to rounding.

Outlook

Production at Pioneer is expected to be higher, between 130 and 140koz, in 2020 due to an increase in head grades and RIP recoveries resulting from a greater contribution of underground ore from NE Bakhmut and the development of an underground mine at Andreevskaya zone. Open pit production is expected to come from Alexandra, Katrin and Yuzhnaya as well as from existing stockpiles. Construction remains on schedule for the flotation plant to be fully operational in Q4 2020.

**2019 total gold production:**

120.4koz – c.23% of total gold production for the year



Pioneer production as a % of total

Key facts:

2001

Pioneer was acquired as a greenfield licence

2.7Moz

Gold produced to date

5,707kt

Ore processed via RIP in 2019

1,337km²

Total gold licence area

6.59Moz

Mineral Resources, including 2.72Moz
Ore Reserves

18 years

Mine life

Albyn

Albyn is the Group's principal non-refractory asset, having contributed c.33% of total gold production in 2019. Albyn operates as a conventional open pit mine with a dedicated RIP processing circuit. The project consists of three adjoining licences that cover multiple orebodies, including Albyn, Elginskoye, Unglichikanskoye and Afanasevskoye. All four orebodies are considered prospective given they remain open down-dip, while the Elginskoye, Unglichikanskoye and Afanasevskoye deposits are also open along strike.

Operating performance

In 2019, Albyn produced 170.9koz which was a c.13% increase on 2018 (151.0koz). The main source of ore was the central zone of the main pit. Recoveries at the processing plant were consistently high, averaging over 93% for the year. Total Cash Costs* decreased by 16% to US\$468/oz (2018: US\$559/oz) and All-in Sustaining Costs* decreased by 29% to US\$690/oz (2018: US\$974/oz).

Total Cash Costs* benefited from higher grades with recoveries remaining at approximately the same level as in 2018 and Rouble depreciation, partially offset by inflation of certain Rouble denominated costs and progressive increase in mining tax rate to 1.2%.

All-in Sustaining Costs* followed the decrease in Total Cash Costs* and also reflect the reversal of impairment of non-refractory ore stockpiles at Albyn. An increase in sustaining capital expenditure due to Elginskoye mine development was offset by no capitalised stripping expenditure during the period. When combined with the increase

in physical ounces sold in 2019 this contributed to further improvement in All-in Sustaining Costs*.

Mining and Processing

Albyn is a large (2.2km long) open pit, bulk tonnage mine and the Group operates its own mining fleet consisting of modern diesel and electrical excavators, dump trucks, drill rigs, bulldozers and other vehicles. Productivity and equipment utilisation is optimised by running two shifts per day throughout the year. Albyn is mostly non-refractory and ore is treated at a dedicated 4.7Mtpa RIP plant which also operates continuously throughout the year. The RIP plant is comprised of two identical crushing and grinding lines, each with a 1.8Mtpa design capacity. Since commissioning in 2011, plant optimisation and improvements have enabled for a 30% increase in processing capacity above design.

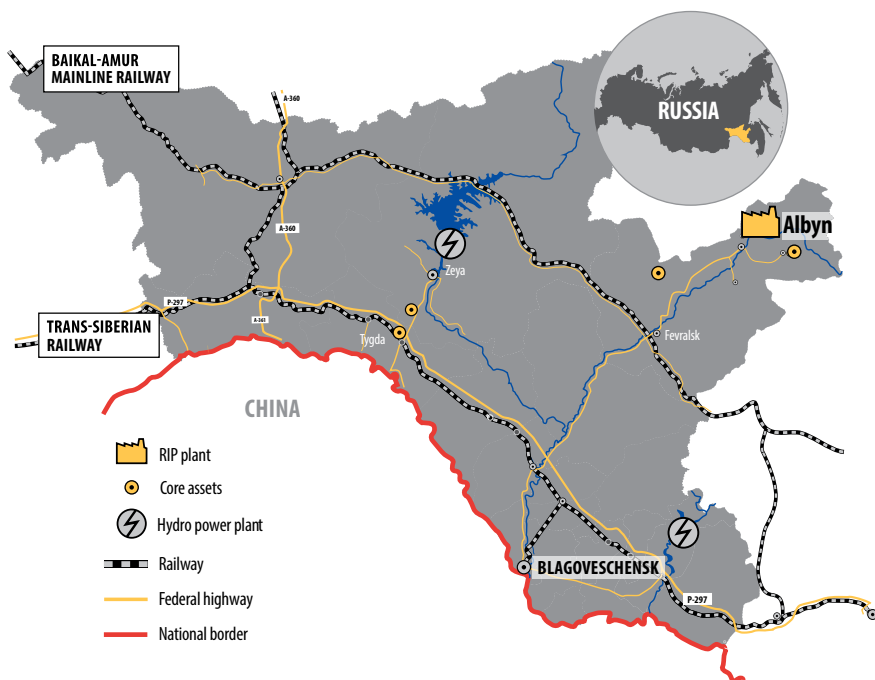
Geology

The Albyn project is located on the Mongolo-Okhotskiy thrust zone within a belt of mineralisation associated with the collision

of the Eurasian and Amur plates. The project consists of four principal deposits: Albyn, Elginskoye, Unglichikanskoye and Afanasevskoye.

Mineralisation at the Albyn deposit occurs as a series of gently-dipping, sub-parallel metasomatic zones which appear to continue down dip. The mineralised zones show variable thickness and grade and extend to c.4.5km in strike length. Mineralisation at Elginskoye is confined within metasomatic zones that dip gently to the south and drilling has confirmed gold mineralisation extends over a strike length in excess of 7km and remains open in all directions. Unglichikanskoye is comprised of a series of sub-parallel, relatively narrow, steeply dipping zones which have been proven over a strike length in excess of 5km and which remain open in all directions. There is a relatively narrow, c.1.5km long, steeply dipping single zone of gold mineralisation at Afanasevskoye which is open down-dip and along strike to the west.

In addition to the four known deposits, there are several potential exploration targets, of which Ulgen, Yasnoye and Leninskoye are considered the most significant. Most of the licence area remains underexplored and considered highly prospective. All known Mineral Resources and Reserves at Albyn deposit are non-refractory, whilst Elginskoye and Unglichikanskoye include both non-refractory and refractory Mineral Resource and Ore Reserves.



Albyn mining operations

	Units	Year ended 31 December 2019	Year ended 31 December 2018
Total material moved	m ³ '000	12,465	18,155
Ore mined	t '000	6,222	3,904
Average grade	g/t	1.22	1.10
Gold content	oz. '000	243.5	137.8

Processing operations (Resin-in-pulp plant)

	Units	Year ended 31 December 2019	Year ended 31 December 2018
Ore milled	t '000	4,602	4,602
Average grade	g/t	1.22	1.09
Gold content	oz. '000	180.2	161.7
Recovery	%	93.9	94.0
Gold recovered	oz. '000	169.3	152.1
Albyn gold production – Doré	oz. '000	170.9	151.0

Figures may not add up due to rounding.

Outlook

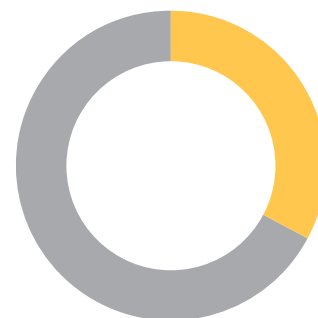
2020 production is expected to be below 2019 levels, between 145 and 155koz, due to a slight decrease in plant throughput, head grade and recovery due to the switch from mining at the Albyn open pit to mining at the Elginskoye open pit. Mining at Albyn is expected to cease altogether in the second half of 2020. To assist with the switch, stockpiled material will be used to contribute additional ore.

In the longer-term, mining is expected to move to satellite Unglichikanskoye deposit. As the Albyn orebody remains open at depth, the Group is also investigating the potential for mining under the open pit which may become an additional source of future production.

Refractory reserves are known to exist at the Elginskoye and Unglichikanskoye deposits and are currently scheduled for processing from 2028 when a flotation plant is planned to concentrate refractory ores prior to transportation to the POX plant for further processing and gold recovery.

**2019 total gold production:**

170.9koz – c.33% of total gold production for the year



Albyn production as a % of total

Key facts:

2005

Albyn was acquired as a greenfield licence

1.3Moz

Gold produced to date

4,602kt

Ore processed via RIP in 2019

1,053km²

Total gold licence area

5.01Moz

Mineral Resources, including 2.50Moz Ore Reserves

18 years

Mine life

Malomir

Malomir is a large, conventional, open pit and underground mining operation that accounted for c.35% of total gold production in 2019. Since completing the POX Hub in late 2018, the focus has shifted to mining mainly refractory gold ores. The mineralisation at Malomir consists of multiple orebodies, of which the Malomir, Quartzitovoye, Ozhidaemoye and Magnetitovoye are the most significant.

Operating performance

Malomir produced a total of 180.3koz of gold in 2019, representing a 132% increase (2018: 77.6koz) mainly due to the mining of refractory ores at the Centralniy pit. The total volume of ore treated at both the RIP and flotation plants increased c.18% compared to 2018, with the flotation plant producing 133kt of refractory concentrates containing 121.4koz of gold in its first calendar year of operations. Following improvements made to the flowsheet during construction, and optimisation of the crushing and grinding circuit undertaken in 2019, concentrate grades reached c.18% above design during the year and throughput exceeded design capacity by c.10% in the fourth quarter.

Non-refractory ore was sourced from the Quartzitovoye zone as well as from underground at Quartzitovoye and stockpiles. The underground mine performed well in 2019, producing 277kt of ore containing c.47koz of gold at an average grade of 5.27g/t. During 2019, a total of 3,752m (49,339m³) of underground workings were completed.

Total Cash Costs* increased by 15% to US\$752/oz (2018: US\$654/oz) and All-in Sustaining Costs* decreased by 5% to US\$1,022/oz (2018: US\$1,058/oz).

Total Cash Costs* were affected by additional costs associated with the ramp-up of the POX Hub and Malomir flotation, inflation of certain Rouble denominated costs and progressive increase in mining tax rate to 1.2%, partially offset by higher grades and recoveries for non-refractory ore and Rouble depreciation.

All-in Sustaining Costs* reflect the increase in Total Cash Costs*, compensated by the increase in physical ounces sold in 2019 with an aggregate of sustaining exploration and capital expenditures and capitalized stripping expenditure during the period remaining at approximately the same level as in 2018.

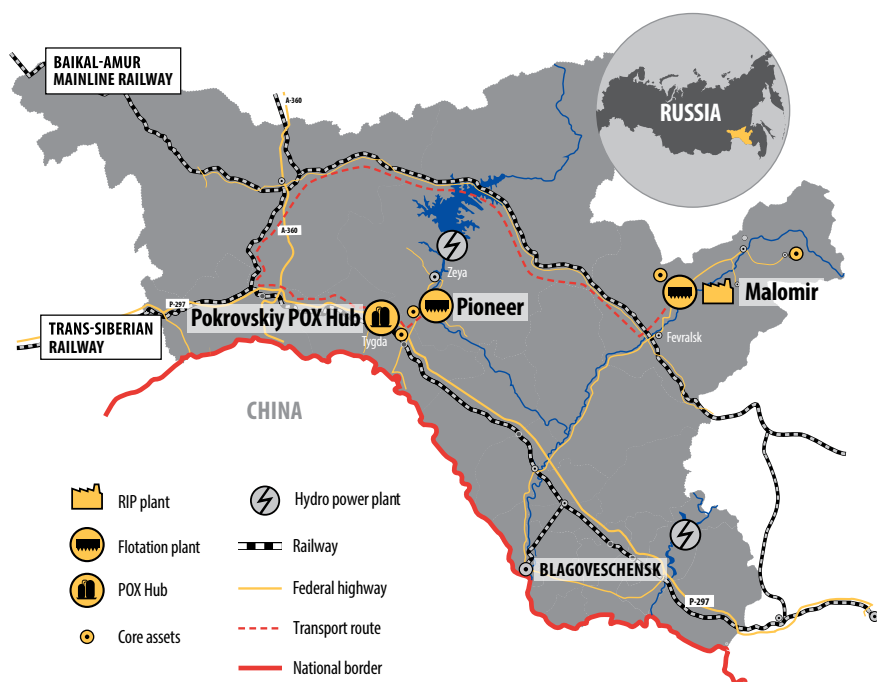
Mining and Processing

Open pit mining at Malomir is undertaken using a combination of Petropavlovsk's own mining fleet and a local contractor, while underground mining is undertaken by a specialist underground contractor. Refractory ores from Malomir and Ozhidaemoye are not amenable to standard RIP

processing methods. Run-of-mine refractory ore is first concentrated on site using flotation into a high-grade concentrate prior to being transported 1,318km via road and rail to the POX Hub for further processing. The first stage of the 3.6Mtpa Malomir flotation plant was completed in 2018. As a result of the transition to mining refractory gold, the crushing and grinding capacity of the RIP circuit has been reduced to 0.4Mtpa, with non-refractory ore being sourced primarily from the Quartzitovoye underground mine and Magnetitovoye open pit.

Geology

Malomir is situated above a major thrust zone which dips gently northwards at 15-20° within the Mongolo-Okhotskiy mineralised belt. Malomir is the most significant orebody within the licence area and the principal zone of mineralisation is tabular in shape with a strike length of 4.2km and down dip extensions of up to 1.5km. Mineralisation is typically between 20 to 30m thick reaching up to 100m in places, with several smaller steeply dipping zones sitting above the principal zone. The main Malomir orebody is refractory. Quartzitovoye is the other significant orebody within the licence which occurs as high-grade, steeply dipping zones and low grade stockwork mineralisation. High-grade zones are non-refractory and open down dip. Ozhidaemoye is an eastern extension of Malomir with a similar tabular morphology dipping gently towards the north. Similarly to Malomir Ozhidaemoye mineralisation is refractory. Magnetitovoye is a small narrow steeply dipping non-refractory satellite orebody situated c.4.5km east from Malomir open pit.



Outlook

Malomir production is expected to be in a range between 155 and 165koz in 2020 due to a scheduled decline in output from the underground and exhaustion of Quartzitovoye non-refractory open pit. Longer term production rates at Malomir will be sustained via the proposed construction of an expansion to the flotation plant which would increase the capacity of the Malomir flotation plant from 3.6Mtpa to 5.4Mtpa. Subject to Board approval and funding, construction could potentially begin before the end of 2020.

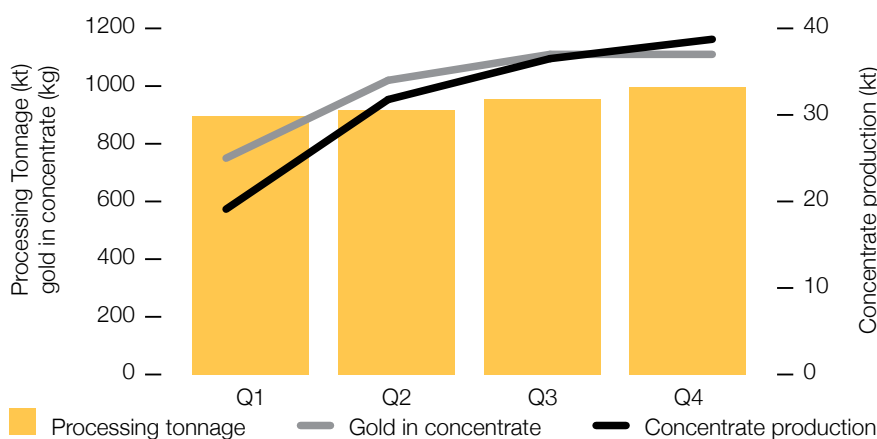
Malomir mining operations

	Units	Year ended 31 December 2019	Year ended 31 December 2018
Total material moved	m ³ '000	7,658	7,464
Non-refractory Ore	t '000	413	2,264
Average grade	g/t	3.96	1.39
Gold Content	oz. '000	52.6	101.3
Refractory Ore	t '000	5,282	837
Average grade	g/t	1.11	1.55
Gold content	oz. '000	189.1	41.8

Processing operations

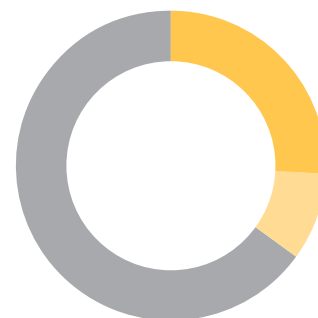
	Units	Year ended 31 December 2019	Year ended 31 December 2018
RIP Plant			
Ore milled	t '000	536	2,375
Average grade	g/t	3.38	1.33
Gold content	oz. '000	58.2	101.7
Recovery	%	78.7	73.6
Gold recovered	oz. '000	45.9	74.8
Flotation Plant			
Ore milled	t '000	3,762	1,266
Average grade	g/t	1.15	1.48
Gold content	oz. '000	139.3	60.2
Recovery	%	87.1	86.6
Yield	oz. '000	3.5	3.6
Concentrate produced	t '000	133	46
Grade	g/t	28.4	35.2
Gold content	oz. '000	121.4	52.1
Malomir Concentrate POX Processing			
Concentrate treated	t '000	155	-
Grade	g/t	30.0	-
Gold in concentrate	oz. '000	149.0	-
Recovery	%	88.6	-
Gold recovered	oz. '000	132.0	-
Malomir gold production – Doré	oz. '000	180.3	77.6

Figures may not add up due to rounding.



2019 total gold production:

180.3koz – c.35% of total gold production for the year



POX (26%) RIP (9%)
Malomir production as a % of total

Key facts:

2003

Malomir was acquired as a greenfield licence

0.9Moz

Gold produced to date

4,298kt

Ore processed via RIP and flotation in 2019

230km²

Total gold licence area

6.84Moz

Mineral Resources, including 3.04Moz Ore Reserves

15 years

Mine life

The POX Hub

Regarded as the future of the gold industry in Russia, the Pressure Oxidation facility ('POX Hub') is one of the most technologically advanced processing plants of its kind. It is Petropavlovsk's newest and most important asset as well as being responsible for providing employment to around 500 persons. The pressure oxidation process is regarded as the most efficient, robust and environmentally responsible way of processing a diverse range of refractory concentrates.

Processing

The POX Hub is the newest, largest and most technologically advanced facility of its kind in Russia. Strategically located near the Trans-Siberian Railway, the POX Hub is powered by cheap and sustainable hydropower and has significant flexibility given its four separate autoclave vessels can process a wide range of third-party gold-bearing concentrates in addition to feed from Petropavlovsk's own mines.

Refractory concentrate is brought to the Hub by road and rail and stored at the intake building. Processing begins by regrinding the concentrates at the former Pokrovskiy plant using the existing, refurbished, milling facilities. Reground concentrate is then sent to the POX circuit where gold-bearing sulphides are oxidised in the autoclaves under high pressures and temperatures to liberate the gold from sulphide minerals, thus enabling the gold to be recovered via conventional resin-in-pulp ('RIP') processing. The state-of-the-art POX circuit is unique given it includes four separate autoclave vessels as well as

high- and low-pressure ancillary circuits.

The four autoclaves are designed to operate at temperatures of around 225°C and pressures of 3,500kPa, which is higher than most POX plants. The layout has been designed to accommodate a 5th and 6th autoclave in the future, which would increase capacity by around 50% compared to the existing level. The process is exothermic and consumes pure oxygen supplied from a purpose-built oxygen plant. Once oxidised, the concentrate is cooled, thickened and filtered through press-filters before having its acidity neutralised by the addition of lime and limestone. The filtered material is then transferred to the RIP plant where gold is recovered as a doré ready for shipping to refineries. Tailings from the POX process are neutralised using limestone before being safely stored inside a redundant open pit at the former mine. RIP tailings are stored at a facility originally constructed for use by the former Pokrovskiy mine.

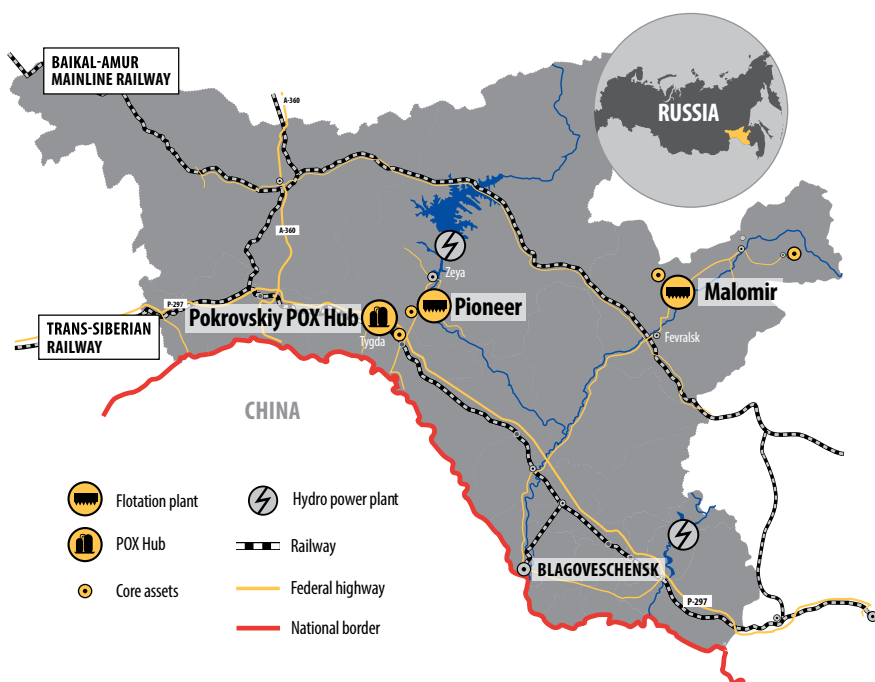
Responsible business

Studies undertaken by the Group and third parties concluded that POX is the most environmentally friendly process for treating a wide variety of refractory gold concentrates, particularly those containing arsenic, which is converted to a stable form, known as scorodite, that can be safely stored in the tailings. The plant is powered by the local grid which is supplied with electricity primarily generated from renewable hydropower which is abundant in the area. Given that pressure oxidation is exothermic, heat generated by the process is utilised for heating the POX complex and office buildings during colder months. Given the success of this project, the Company is investigating the potential to capture more of the heat for heating the accommodation blocks. The Company is also investigating ways to utilise this energy during warmer months. In addition to the above, the plant provides employment to around 500 persons.

Operations

Operationally, 2019 was an extremely successful first year at the POX plant. Wet commissioning began in October 2018, with first concentrate fed into the plant in early December and first gold poured on 21 December 2018. The plant reached its design capacity (for Malomir concentrates) of 11.5t to 12.0t per hour at the first two autoclaves within just a few weeks. Throughput ramped up steadily over the year, with 32kt of concentrate being processed in Q1 and 63kt being processed in Q4. Gold recovered increased from 28koz in Q1 to 83koz in Q4, while recoveries increased steadily from 84% to 94% over the year. In total, the POX Hub processed 155kt of Malomir concentrate and 33kt of third-party concentrate to produce c.180koz (or c.35% of the Group total) of gold in 2019.

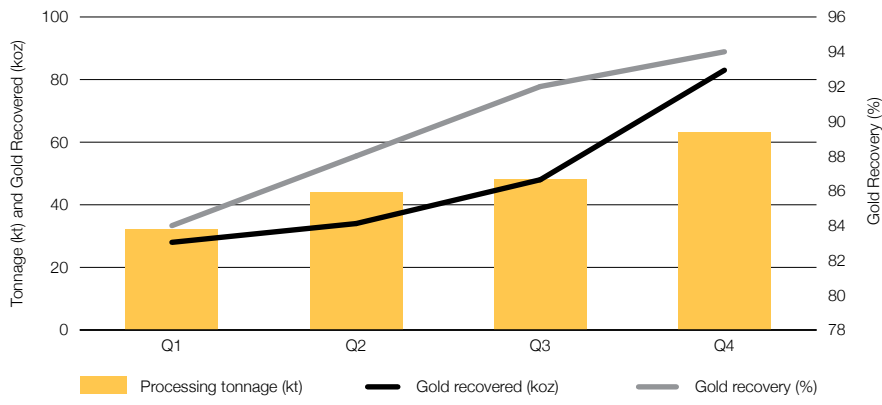
For the year, processing costs averaged US\$213.6/t which is expected to fall as throughput increases and the plant reaches full capacity.



POX Hub performance metrics

POX Plant	Unit	2019
Concentrate treated	kt	188
Concentrate grade	g/t	35.5
Gold in concentrate	koz	213
Gold Recovery	%	90.5
Gold Recovered	koz	193
Gold Produced	koz	179.5

Ramp up of the POX Hub in 2019



2019 total gold production:

179.5koz – 35% of total gold production for the year



- Malomir refractory (26%)
 - Third-party refractory (9%)
 - Pioneer, Malomir & Albyn non-refractory (65%)
- Production as a % of total

Key Facts:

2018

Production starts after 13 years of research, planning and construction activities

35%

Of total gold production in 2019 from POX Hub

Up to 500kt p.a.

Total capacity (depending on concentrate qualities)

4 autoclaves

Each able to process different concentrate types

12.99Moz

Refractory Mineral Resources, including 5.99Moz Ore Reserves

At the mine site	Crushing and Grinding	<ul style="list-style-type: none"> Grinding helps break up refractory ores into finer particles
	Preconcentration	<ul style="list-style-type: none"> Standard flotation technique Technology widely used in the mining industry, for both base and precious metals Reduces transport costs
At the POX Hub	POX	<ul style="list-style-type: none"> Sulphide minerals break down at high temperature combined with high pressure, thus releasing gold Gold removed from the solution via standard carbon-in-pulp process

Outlook

In 2020, the POX Hub is expected to process between 300 and 330kt of concentrate and produce 370-430koz of gold from all four autoclaves. The sources of concentrate include between 135 and 140kt from Malomir, between 35 to 45kt from the new flotation plant at Pioneer and an estimated 130-145kt from third-party producers, depending on availability. Processing costs are expected to be below the level of 2019, due to higher throughput and operational improvements.

The POX Hub

A strategic asset

POX at the heart of our strategy

The POX Hub, together with the associated flotation plants at Malomir and Pioneer (the 'POX project'), sits at the heart of Petropavlovsk's strategy and is the principal driver of future value for the Group. Pressure oxidation was selected for being the most efficient and environmentally friendly technology to process refractory gold ores. Refractory gold is an important future source of gold production given that approximately 15-30% of Russian classified gold reserves are refractory, while c.5.99Moz of the Group's own reserves are also refractory. The lack of sufficient suitable processing capacity in Russia means refractory gold occurrences are often highly attractive in terms of grade and mining profile yet are undeveloped or under-explored and readily available.

As the owner of one of only two POX plants in Russia, this makes the POX Hub an important strategic asset for Petropavlovsk.

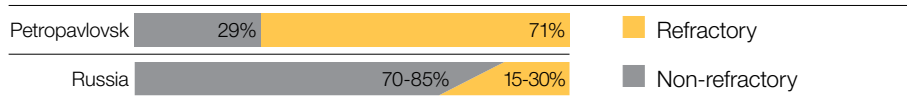
On account of its flexibility, the plant is capable of profitably treating a wide range of third-party concentrates, most of which are higher quality (in terms of grade and the presence of carbon and/or sulphur) than concentrates produced at the Group's own Malomir and Pioneer mines. As a result, in addition to conducting exploration work on its own properties, the Company is considering the attractiveness of several refractory projects in the region and investigating the potential to acquire new licences where low-cost and high-return projects can be brought into production quickly and with a low capital intensity.

The POX Hub concept

The POX Hub is strategically located at the site of the Company's first and now depleted mine, Pokrovskiy, where it benefits from existing milling facilities, road and rail infrastructure, low cost renewable power (hydro-electric) as well as a nearby limestone deposit – a key ingredient in the POX process.

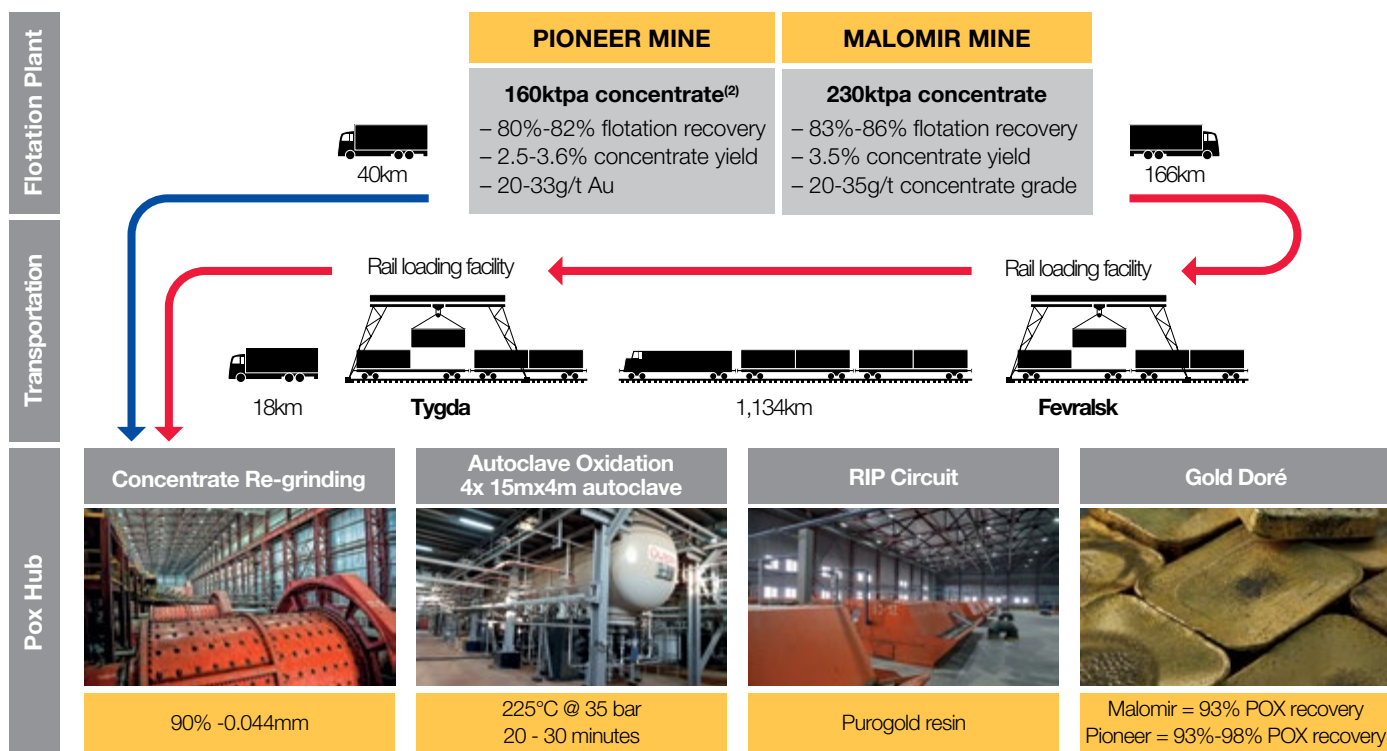
Located just 18km by road from the Trans-Siberian Railway enables concentrates to be sourced over large distances and the plant has processed third-party material from Russia and Kazakhstan in addition to its own mine at Malomir which travels over 1,300km by road and rail. This also means that the Company can consider expanding inorganically or developing the best assets in conjunction with other parties over a wide area given distance is not necessarily a constraint.

Split of refractory and non-refractory reserves



The processing of refractory gold ores

The journey from refractory ore to gold doré (total recovery of 74%-80%)(1)



(1) Total recovery calculated for Malomir as 83%-86% (conc. recovery) x 93% (POX recovery) = 77%-80%. For Pioneer, calculated as: 80%-82% x 93%-98% = 74%-80%.

(2) Pioneer concentrate tonnages depend on the concentrate yield which is expected to range from 2.5-3.6%.

Technical Aspects

The pressure oxidation process

The processing of refractory gold ores begins with crushing and grinding, followed by flotation at the mine site which reduces the volume material down to between 2.8% and 4.2% of the original mass by selectively enriching gold mineralisation. The resulting concentrate is then transported to the POX Hub by road and/or rail for further processing and gold recovery.

Flotation tanks at Malomir

The POX Hub is designed to operate at a pressure of 3,500kPa and a temperature of 225°C which is higher than most other POX plants and enables the efficient processing of a variety of refractory feeds, including double-refractory concentrates.

Four separate autoclave vessels provide a significant degree of flexibility to Petropavlovsk since concentrates from Malomir, Pioneer and other future sources (including third-party) can be processed optimally, either individually or as blends, in separate autoclaves. It also means that scheduled maintenance can be undertaken by shutting down only one autoclave at a time, which means each individual autoclave is expected to operate for 7,500 hours per year once at full capacity.

Throughput rates are determined by the specific characteristic of the concentrate and particularly the level of sulphur, with high sulphur concentrates taking longer to process given the additional time required to oxidise sulphur in the autoclaves. As a result, the capacity of the plant varies on an annual basis according to the material it is processing.

The POX project

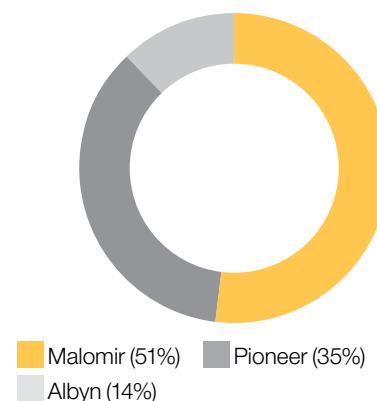
The Group controls substantial refractory resources totalling c.12.99Moz and spread across Malomir, Pioneer and Albyn projects.

Over 10 years ago, the Board approved a large-scale investment into the construction of the necessary processing facilities, including two flotation plants and the POX Hub, to recover refractory gold and thus monetise this portion of its asset base.

The Group's first flotation plant was successfully commissioned at Malomir in 2018 at a capacity of 3.6Mtpa and produced concentrate which was sent to the POX Hub for further processing and gold recovery. Concentrate grades varied between 21 and 32g/t of gold with a sulphur content ranging from 21 to 29%. Given the presence of natural carbon in the refractory ores, Malomir concentrate is known as double refractory, which requires special measures to neutralise the carbon so as gold recoveries are not negatively impacted. These include strict control over chlorine ion levels and the relatively high pressure and temperature of the autoclaves. As a result, the average recovery of gold in the POX circuit is expected to be high at between 93% to 96%.

The construction of a second 3.6Mtpa flotation plant began in H2 2019 at Pioneer. The construction is well under way and the new plant is expected to be fully operational in Q4 2020. Once in production, Pioneer concentrate grades are anticipated to vary between 20 and 33g/t of gold, with an average gold grade of 24.2g/t and average sulphur grade of 21.0%. Gold recovery in the POX circuit is conservatively expected to be

Group refractory resources



around 93%, although the Group's engineers believe 98% is achievable.

Subject to Board approval, the Group is expecting to undertake an expansion, commencing late-2020, of the flotation plant at Malomir which would increase capacity to 5.4Mtpa of concentrate.

Longer-term, a flotation plant at Albyn is envisaged for 2028 to process refractory ores at the Elginskoye and Unglichikanskoye deposits. The gold grade of these concentrates is anticipated to vary between 20 and 40g/t, and the average sulphur grade is expected to be around 15%.

Third-party material and inorganic growth

Spare capacity at the POX Hub enables the Group to process third-party concentrates available from several sources in Russia and Kazakhstan. Starting in H2 2019, a total of 33kt of third-party concentrate was processed up to the end of 2019, with average monthly grades ranging between c.38 and c.90g/t and average monthly gold recoveries ranging between 94.1 and 95.3%. The Group anticipates that 2020 will be the peak year for treating third-party concentrates as the new flotation plant at Pioneer and expanded Malomir plant become operational. The Company is also investigating the possibility of making a strategic acquisition of a low-cost asset or licence which can be brought into production on a 12 to 18-month timeframe and which would enable the POX plant to operate at full capacity by treating material sourced entirely from Petropavlovsk's own operations.



The POX Hub continued

Operational parameters of the POX project

Stage	Parameter	Malomir	Pioneer	Malomir+Pioneer Total	3rd party
Flotation	Ore processing capacity	3.6Mtpa (Malomir 2 lines) 5.4Mtpa (Malomir 3 lines)	3.6Mtpa (Pioneer 2 lines) 5.4Mtpa (Pioneer 3 lines)	7.2Mtpa 10.8Mtpa	N/A
	Concentrate yields	3.5%	2.5-3.6%	2.5-3.6%	N/A
	Concentrate grades	20-35g/t	20-33g/t	20-35g/t	27-70g/t
	Concentrate tonnages	<140ktpa (Malomir Stage 1) <230ktpa (Malomir Stage 2)	<100ktpa (Pioneer Stage 1) <160ktpa (Pioneer Stage 2)	<240ktpa <390ktpa	N/A
	Recoveries	83%-86%	80%-82%	81%-84%	N/A
POX Hub	Sulphur content	20-40%	21%	20%-32%	21%
	Recoveries	93%	93%-98%	93%-96%	92-96%
Combined Total	Total Recovery	77%-80%	74%-80%	74%-80%	92-96%



The making of the POX plant

Key data

1st

R&D dedicated pressure oxidation centre and the only one of its kind in Russia

1st

Pilot autoclave in Russia

7 patents

For treating refractory ores, two of which are being used at the POX Hub

3 months

From start-up to first gold production

2 weeks

From start-up to achieving full capacity in each autoclave – an industry record

An industry first – Petropavlovsk's in-house research and development network

POX Hub		
The competence to implement complex, challenging projects		
Test plant* (est. 2009)		Unique pilot autoclave* (2010)
Exploration companies – NGGF Regis* (since 2004) – Central analytical laboratory* supports exploration research and runs complex analyses (est. 2004)	Laboratories 5 laboratories at mines (since 1998)	Kapstroj* construction company
Research institutes and R&D Centres		
Multidisciplinary engineering centre PHM Engineering* (est. 2004)	Irgiredmet* Scientific Institute (acquired 2006)	RDC Hydrometallurgy* est.2008

*Took part in implementing POX Hub project.

The key to the success of our POX project - our unique in-house technical and scientific expertise

Petropavlovsk's unique approach to the processing of complex refractory ores is based around having its own in-house technical and scientific expertise.

Since taking the decision in 2006 to commit to pressure oxidation, as part of its long-term strategy, the Company's in-house team have worked almost independently from start to completion of the project. Initially, this was done through researching existing technologies elsewhere in the world, before designing and developing its own customised technologies.

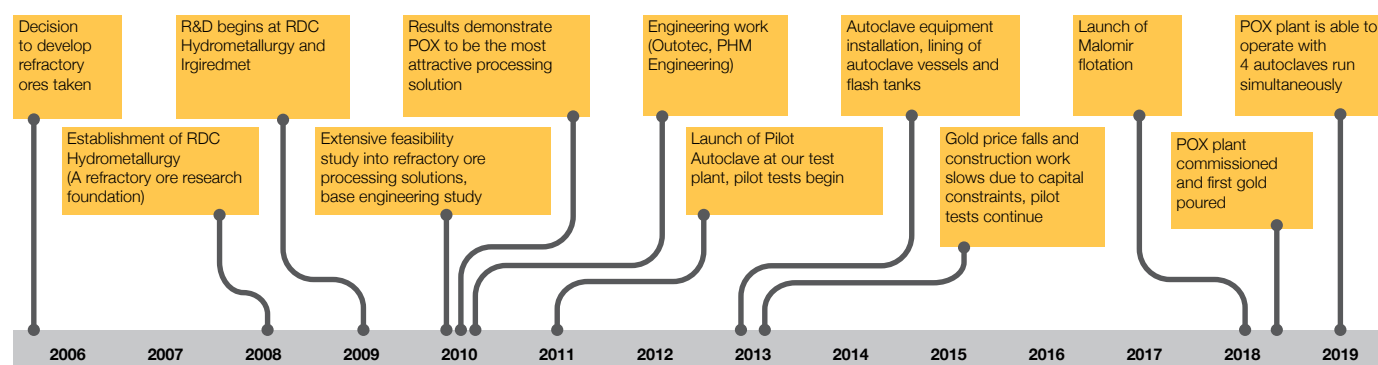
The smooth ramp-up of POX Hub stands as a record for the industry, and reflects more than a decade of R&D. This early investment, and the resulting accumulation of its technical expertise over the period, is now paying off in other areas as the team is fully focused on continuous improvement of the POX plant. In addition, the Company is well positioned to

introduce a new generation of technologies to a potential 5th and 6th autoclave.

Petropavlovsk's success story at the POX Hub

The POX project began with the establishment of a research centre intended to build-out our expertise, which began by studying the design and performance of other autoclaves around the world. Subsequently, Petropavlovsk's own scientific institutions were involved at all stages, from initial laboratory tests in 2009 to monitoring and providing daily feedback during commissioning and ramp-up.

POX Hub Timeline



The making of the POX plant continued

RDC Hydrometallurgy (“RDC”)

The ‘think-tank’ of pressure oxidation

RDC undertook 70 research projects over the past 10 years, including the POX project.

Overview:

RDC is made up of over 40 employees with both practical and academic experience and includes some of Russia’s leading experts in the field of pressure oxidation technology. These include one Doctor of Science and eleven PhDs, seven of which wrote their PhD thesis on the POX plant.



Petr Zaytsev
PhD in Technical Sciences

Head of the Research and Technology Division

“I received an offer to join the RDC team as a researcher at the beginning. I was lucky enough to work with Lev Chugaev, one of the most respected hydrometallurgical scientists in the field of precious metals in Russia.

The POX Hub has been and remains our flagship project. This is one of the few projects in Russia which went through all stages from the first laboratory tests to industrial production.”

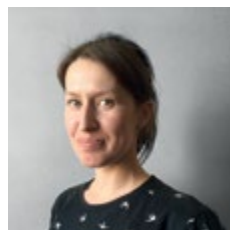


Ilya Fomenko
PhD in Technical Sciences

Director of Scientific work

“I went into science almost immediately after graduating, and my role at RDC was my second one.

I was immediately attracted by the opportunity of participating in researching and developing new technologies as well as solving challenging and interesting technical problems.”



Anna Kabisova
PhD in Technical Sciences

Head of the Technical Research Laboratory

“By becoming part of RDC Hydrometallurgy, I entered the complex and romantic world of science.

Because it is so unique, all employees at RDC are inspired by the work we do on the POX project. The POX Hub is therefore the result of the work of people who were truly passionate about it.”

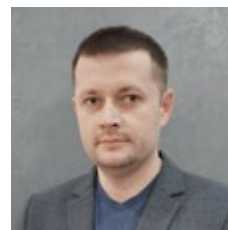


Sergey Polezhaev
PhD in Technical Sciences

Senior Research Associate

“Being on the POX project team meant I participated in laboratory research & pilot trials and subsequently in the commissioning phase.

All the project’s parameters, such as high sulphur and the refractory nature of the ores, the high-temperature autoclave process etc. make it unique on a world scale.”



Sergey Lyah
PhD in Technical Sciences

Head Engineer

“Since 2013, I have been responsible for coordinating and conducting pilot tests, 90% of which are still being carried out on behalf of Petropavlovsk.

RDC’s scientific research has enabled Petropavlovsk to successfully unlock the potential of its gold-bearing refractory resource base.”

Starting in January 2009, RDC began performing test works that would eventually lead to the POX Hub of today. Over this time, RDC tested hundreds of metallurgical samples, including regular testing of samples from Petropavlovsk’s unique pilot autoclave to ensure that it closely replicates the processing environment of the full-scale plant.

These studies have been instrumental in defining the optimal design and processing parameters of the POX Hub which has significantly de-risked the project. For example, our initial tests on Malomir concentrate samples suggested recovery rates of only 70% were possible. However, further testing

and research determined the optimal processing parameters such that recoveries of between 92 and 94% are now, as was demonstrated in Q4 2019. This research has been highly effective in improving profitability through decreasing the cost of recovering gold.

A few thoughts from the next generation of RDC scientists:

De-risking the project and quickly reaching the optimal processing parameters following commissioning of the plant.

Petr Zaytsev: “We ran technical and financial calculations in the early days of operations at the POX plant which compared the very high recovery rates to the ramp-up of similar plants around the world. This concluded the investment Petropavlovsk made into scientific research over the past 11 years would (theoretically) be paid off several times over in the first year of operations.”

Sergey Lyah: “The launch of the POX Hub can be considered as unprecedented and therefore unique – the plant reached design parameters in its first few months of operations and now shows consistently strong results and high gold recoveries.”

Ilya Fomenko: “Having in-house research expertise is a fundamental difference between Petropavlovsk’s approach and the path that other companies have followed when implementing their autoclave projects. There are significant advantages to this approach - for example, Petropavlovsk does not need to send samples to another region or country for pilot testing since the pilot autoclave is located close to the POX facility. There is no need to bring in large teams of third-party specialists during launch and ramp-up, etc. All of this was done in-house... and it was done well!”

Treating complex ores

Petr Zaytsev: “Science has made it possible for Petropavlovsk to monetise significant reserves of refractory gold which would not otherwise have any value.”

Sergey Polezhaev: “The scientific element of the POX project has significantly expanded the mineral resource base of the company. In the early stages of the Company’s development, the extraction of gold from refractory ore at Malomir was considered uneconomic. Today, with the successful

start-up of the POX project, the relevance and importance of refractory gold has increased significantly. Not only does this apply to Malomir, but also other gold-bearing refractory orebodies.

RDC is now focusing on ways to process refractory ores containing high amounts of organic carbon. Such ores cannot currently be processed in Russia and are either exported or stored with the possibility of further processing as tailings. Petropavlovsk’s scientific strengths are therefore helping the Company to expand the number of opportunities for its future.”

Training personnel

Ilya Fomenko: “In Russia there are no educational institutions capable of teaching our specialists how to operate an autoclave facility, so we needed to create our own programmes. We began by developing learning and training materials which tried to incorporate all important points in an accessible and understandable way. Future operators were then given practical training on a specially created simulator that enables them to control a virtual autoclave. This helped the operators enormously and they were able to learn quickly and move onto controlling a real-life autoclave. The POX team is relatively young and did not take long to master new skills, although we remain on hand to help and advise them if they have any questions. I believe this approach would have contributed to the smooth launch of the POX Hub.

Anna Kabisova: “I can see, through my interaction with POX personnel, that the training programme designed by RDC has given them a deep understanding of hydrometallurgy and the autoclave process. The programme was developed by the chief engineer of RDC which made it possible to quickly and efficiently train personnel who have now fully mastered the POX Hub.”

The distinctive features of the POX plant

- High temperatures and pressures enable it to efficiently process a wide range of refractory feeds;
- Its robust design, flexible equipment and technological setup allows it to process materials with different compositions and metallurgical characteristics at the same time; and
- Its ability to process even the most complex ores, including what is known as ‘double’ refractory ore, where gold is not only trapped in sulphide minerals, but its recovery is affected by the presence of carbon.

The future of the POX plant

Technological improvements are constantly being made to solve some of the key challenges associated with treating refractory ores (Petropavlovsk’s and those of third parties):

- Isolating and recovering antimony as a by-product;
- Reducing the amount of organic carbon in concentrates; and
- Suppressing the sorption activity of a carbonaceous substance through (i) heat treatment of concentrates which have passed through the autoclaves, and (ii) low and high temperature pressure oxidation.

It is possible to install additional autoclaves at the POX Hub and it is envisaged that these might be able to process some very complex refractory materials, including:

- Pyrrhotite-bearing concentrates;
- Cuprous and antimony gold-bearing concentrates;
- Triple-carbon concentrates;
- Concentrates from the tailings of existing mines; and
- Bio-cake.

Reserves & Resources

Review of Ore Reserves and Mineral Resources

In line with best industry practice, Petropavlovsk reports its Mineral Resources and Ore Reserves in accordance with the JORC Code.

The Mineral Resource and Ore Reserve estimates are an update on independent estimates prepared by Wardell Armstrong International (WAI), a UK based independent technical consultancy firm, in April 2017. The updated estimates incorporate all material exploration completed in 2017, 2018 and 2019 as well as depletion due to mining activities. To reflect recent market trends, the Company has increased its long-term gold price assumption for Mineral Resource reporting from US\$1,500/oz to US\$1,700/oz. Similarly, the long-term gold

price assumption for Ore Reserve reporting was changed from US\$1,200/oz to US\$1,400/oz.

As at 31 December 2019, total Group Mineral Resources (including Reserves) amounted to 21.03Moz of gold compared to 20.52Moz twelve months previously, with total Reserves amounting to 8.46Moz compared to 8.21Moz in the previous year. The increase in Mineral Resources is due to a combination of exploration success at Pioneer and Malomir and a higher gold price assumption. In particular, the higher price assumption has enabled tailings stored at Pioneer and Pokrovskiy to be included as JORC Inferred Resources given their potential to be re-processed.

There was an overall decrease in Ore Reserves at Pioneer due to mining depletion and the use of more conservative recovery and cost assumptions with respect to estimating refractory gold ores. This was more than offset by an increase in Ore Reserves at Malomir and Albyn. The increase at Malomir resulted from an updated pit design and the inclusion of new discoveries with open pit mining potential at the Quartzitovoye area. An increase in Ore Reserves at Albyn resulted from successful in-fill drilling which converted Inferred resources into Ore Reserves at the Elginskoye deposit.

An independently audited estimate is expected to be published during Q3 2020. The tables below provide details of Group Mineral Resources and Ore Reserves.

Group Ore Reserves as at 31/12/2019 (in accordance with the JORC Code 2012 ⁽¹⁾)

Total Open Pit and Underground Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	55,300	0.78	1.38
	<i>Probable</i>	223,316	0.99	7.08
	<i>Proved+Probable</i>	278,616	0.94	8.46
Non-Refractory	<i>Proved</i>	22,158	0.69	0.49
	<i>Probable</i>	57,964	1.06	1.98
	<i>Proved+Probable</i>	80,122	0.96	2.47
Refractory	<i>Proved</i>	33,141	0.84	0.89
	<i>Probable</i>	165,352	0.96	5.10
	<i>Proved+Probable</i>	198,494	0.94	5.99

Total Open Pit Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	55,103	0.75	1.34
	<i>Probable</i>	221,952	0.95	6.81
	<i>Proved+Probable</i>	277,055	0.91	8.14
Non-Refractory	<i>Proved</i>	21,961	0.63	0.45
	<i>Probable</i>	57,094	1.00	1.84
	<i>Proved+Probable</i>	79,055	0.90	2.28
Refractory	<i>Proved</i>	33,141	0.84	0.89
	<i>Probable</i>	164,858	0.94	4.97
	<i>Proved+Probable</i>	197,999	0.92	5.86

Total Underground Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	197	7.56	0.05
	<i>Probable</i>	1,364	6.25	0.27
	<i>Proved+Probable</i>	1,561	6.42	0.32
Non-Refractory	<i>Proved</i>	197	7.56	0.05
	<i>Probable</i>	870	5.08	0.14
	<i>Proved+Probable</i>	1,067	5.54	0.19
Refractory	<i>Proved</i>	–	–	–
	<i>Probable</i>	494	8.32	0.13
	<i>Proved+Probable</i>	494	8.32	0.13

Group Mineral Resources as at 31/12/2019 (in accordance with the JORC Code 2012 ⁽¹⁾)

Total Open Pit and Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	75,490	0.87	2.11
	<i>Indicated</i>	464,138	0.86	12.76
	<i>Measured+Indicated</i>	539,628	0.86	14.87
	<i>Inferred</i>	293,575	0.65	6.16
Non-Refractory	<i>Measured</i>	37,690	0.93	1.13
	<i>Indicated</i>	143,853	0.95	4.38
	<i>Measured+Indicated</i>	181,544	0.94	5.51
	<i>Inferred</i>	134,738	0.58	2.53
Refractory	<i>Measured</i>	37,800	0.81	0.98
	<i>Indicated</i>	320,285	0.81	8.38
	<i>Measured+Indicated</i>	358,084	0.81	9.37
	<i>Inferred</i>	158,837	0.71	3.63

Total Open Pit Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	73,979	0.80	1.90
	<i>Indicated</i>	457,788	0.82	12.05
	<i>Measured+Indicated</i>	531,767	0.82	13.95
	<i>Inferred</i>	285,832	0.60	5.54
Non-Refractory	<i>Measured</i>	36,179	0.79	0.92
	<i>Indicated</i>	138,685	0.87	3.86
	<i>Measured+Indicated</i>	174,864	0.85	4.78
	<i>Inferred</i>	127,593	0.48	1.97
Refractory	<i>Measured</i>	37,800	0.81	0.98
	<i>Indicated</i>	319,103	0.80	8.18
	<i>Measured+Indicated</i>	356,903	0.80	9.17
	<i>Inferred</i>	158,240	0.70	3.57

Total Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	1,511	4.33	0.21
	<i>Indicated</i>	6,350	3.50	0.71
	<i>Measured+Indicated</i>	7,861	3.66	0.93
	<i>Inferred</i>	7,743	2.47	0.62
Non-Refractory	<i>Measured</i>	1,511	4.33	0.21
	<i>Indicated</i>	5,168	3.10	0.51
	<i>Measured+Indicated</i>	6,680	3.38	0.72
	<i>Inferred</i>	7,146	2.43	0.56
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	1,181	5.27	0.20
	<i>Measured+Indicated</i>	1,181	5.27	0.20
	<i>Inferred</i>	598	2.98	0.06

Reserves & Resources continued

Summary of Ore Reserves by Asset as at 31/12/2019 (in accordance with the JORC Code 2012 ⁽¹⁾)

Malomir Open Pit and Underground Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	18,830	0.76	0.46
	<i>Probable</i>	83,226	0.97	2.58
	<i>Proved+Probable</i>	102,057	0.93	3.04
Non-Refractory	<i>Proved</i>	12	1.71	0.001
	<i>Probable</i>	647	1.98	0.04
	<i>Proved+Probable</i>	659	1.97	0.04
Refractory	<i>Proved</i>	18,819	0.76	0.46
	<i>Probable</i>	82,579	0.96	2.54
	<i>Proved+Probable</i>	101,398	0.92	3.00

Malomir Open Pit Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	18,828	0.76	0.46
	<i>Probable</i>	83,011	0.96	2.56
	<i>Proved+Probable</i>	101,838	0.92	3.02
Non-Refractory	<i>Proved</i>	9	1.00	0.0003
	<i>Probable</i>	432	1.33	0.02
	<i>Proved+Probable</i>	440	1.32	0.02
Refractory	<i>Proved</i>	18,819	0.76	0.46
	<i>Probable</i>	82,579	0.96	2.54
	<i>Proved+Probable</i>	101,398	0.92	3.00

Malomir Underground Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	3	3.93	0.0004
	<i>Probable</i>	216	3.27	0.02
	<i>Proved+Probable</i>	218	3.28	0.02
Non-Refractory	<i>Proved</i>	3	3.93	0.0004
	<i>Probable</i>	216	3.27	0.02
	<i>Proved+Probable</i>	218	3.28	0.02
Refractory	<i>Proved</i>	–	–	–
	<i>Probable</i>	–	–	–
	<i>Proved+Probable</i>	–	–	–

Albyn Ore Reserves (all open pit)

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	12,927	0.74	0.31
	<i>Probable</i>	65,537	1.04	2.19
	<i>Proved+Probable</i>	78,465	0.99	2.50
Non-Refractory	<i>Proved</i>	9,704	0.62	0.19
	<i>Probable</i>	43,864	0.99	1.40
	<i>Proved+Probable</i>	53,568	0.92	1.59
Refractory	<i>Proved</i>	3,223	1.11	0.11
	<i>Probable</i>	21,673	1.15	0.80
	<i>Proved+Probable</i>	24,896	1.14	0.91

Pioneer Open Pit and Underground Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	21,514	0.75	0.52
	<i>Probable</i>	72,358	0.95	2.20
	<i>Proved+Probable</i>	93,871	0.90	2.72
Non-Refractory	<i>Proved</i>	10,414	0.61	0.20
	<i>Probable</i>	11,258	1.22	0.44
	<i>Proved+Probable</i>	21,672	0.92	0.64
Refractory	<i>Proved</i>	11,100	0.88	0.31
	<i>Probable</i>	61,100	0.90	1.76
	<i>Proved+Probable</i>	72,199	0.89	2.07

Pioneer Open Pit Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	21,320	0.68	0.47
	<i>Probable</i>	71,209	0.85	1.95
	<i>Proved+Probable</i>	92,529	0.81	2.42
Non-Refractory	<i>Proved</i>	10,220	0.47	0.16
	<i>Probable</i>	10,604	0.94	0.32
	<i>Proved+Probable</i>	20,824	0.71	0.48
Refractory	<i>Proved</i>	11,100	0.88	0.31
	<i>Probable</i>	60,606	0.84	1.63
	<i>Proved+Probable</i>	71,705	0.84	1.94

Reserves & Resources continued

Pioneer Underground Ore Reserves

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	194	7.61	0.05
	<i>Probable</i>	1,148	6.81	0.25
	<i>Proved+Probable</i>	1,343	6.93	0.30
Non-Refractory	<i>Proved</i>	194	7.61	0.05
	<i>Probable</i>	654	5.68	0.12
	<i>Proved+Probable</i>	848	6.12	0.17
Refractory	<i>Proved</i>	–	–	–
	<i>Probable</i>	494	8.32	0.13
	<i>Proved+Probable</i>	494	8.32	0.13

Tokur Ore Reserves (all open pit)

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Proved</i>	2,028	1.47	0.10
	<i>Probable</i>	2,195	1.44	0.10
	<i>Proved+Probable</i>	4,223	1.45	0.20
Non-Refractory	<i>Proved</i>	2,028	1.47	0.10
	<i>Probable</i>	2,195	1.44	0.10
	<i>Proved+Probable</i>	4,223	1.45	0.20
Refractory	<i>Proved</i>	–	–	–
	<i>Probable</i>	–	–	–
	<i>Proved+Probable</i>	–	–	–

Notes:

- (1) With an exception of Tokur, Group Ore Reserves statements are prepared internally as an update of the April 2017 WAI estimate. The Pioneer, Malomir and Albyn Reserves were prepared in April 2020 in accordance with JORC Code 2012; Tokur Reserves were prepared in 2010 by WAI in accordance with JORC Code 2004 and there have been no changes to the Tokur estimates since that date.
- (2) Pioneer, Malomir and Albyn Ore Reserves for open pit extraction are estimated within economical pit shells using a US\$1,400/oz gold price assumption and applying other modifying factors based on the projected performance of these operating mines. Tokur Reserves have been based on a US\$1,000/oz gold price assumption, together with operating costs assumptions relevant at the time of the estimate
- (3) The Open Pit Reserves cut-off grade for reporting varies from 0.30 to 0.70g/t Au, depending on the asset and processing method
- (4) Underground Ore Reserves estimates use a mine design with decline access, trackless mining equipment and a sublevel open stope mining method with or without back fill
- (5) Reserve figures have been adjusted for anticipated dilution and mine recovery
- (6) The Underground Reserves cut-off grade for reporting is 1.5g/t Au
- (7) In accordance with JORC Code, all open pit and underground designs have been based on Measured and Indicated Resources; in addition to the Proved and Probable Reserves quoted above, the design captures the following Inferred Resource:
- Pioneer: 61,006kt@0.30g/t (0.59Moz) of non-refractory and 7,647kt @ 0.67g/t (0.16Moz) of refractory;
 - Malomir: 166kt @ 0.77g/t (0.004Moz) of non-refractory and 6,453kt@0.89g/t (0.18Moz) of refractory
 - Albyn 4,296@1.01g/t (0.2Moz) of non-refractory and 55.7kt@ 1.25g/t (0.02Moz) of refractory
- (8) Figures may not add up due to rounding

Summary of Mineral Resources by Asset as at 31/12/2019 (in accordance with JORC Code 2012 ⁽²⁾)

Malomir Open Pit and Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	19,016	0.77	0.47
	<i>Indicated</i>	134,250	0.87	3.77
	<i>Measured+Indicated</i>	153,267	0.86	4.24
	<i>Inferred</i>	113,941	0.71	2.60
Non-Refractory	<i>Measured</i>	18	0.90	0.001
	<i>Indicated</i>	1,919	1.85	0.11
	<i>Measured+Indicated</i>	1,937	1.84	0.11
	<i>Inferred</i>	1,251	1.50	0.06
Refractory	<i>Measured</i>	18,999	0.77	0.47
	<i>Indicated</i>	132,331	0.86	3.66
	<i>Measured+Indicated</i>	151,330	0.85	4.13
	<i>Inferred</i>	112,690	0.70	2.54

Malomir Open Pit Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	16,047	0.31	0.16
	<i>Indicated</i>	125,841	0.87	3.54
	<i>Measured+Indicated</i>	141,888	0.81	3.70
	<i>Inferred</i>	95,862	0.72	2.22
Non-Refractory	<i>Measured</i>	8	0.78	0.0002
	<i>Indicated</i>	14,196	0.69	0.32
	<i>Measured+Indicated</i>	14,204	0.69	0.32
	<i>Inferred</i>	7,603	0.73	0.18
Refractory	<i>Measured</i>	16,039	0.31	0.16
	<i>Indicated</i>	111,645	0.90	3.22
	<i>Measured+Indicated</i>	127,684	0.82	3.38
	<i>Inferred</i>	88,259	0.72	2.04

Malomir Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	330	3.86	0.04
	<i>Indicated</i>	466	3.54	0.05
	<i>Measured+Indicated</i>	796	3.67	0.09
	<i>Inferred</i>	513	2.61	0.04
Non-Refractory	<i>Measured</i>	330	3.86	0.04
	<i>Indicated</i>	466	3.54	0.05
	<i>Measured+Indicated</i>	796	3.67	0.09
	<i>Inferred</i>	513	2.61	0.04
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

Reserves & Resources continued

Albyn Open Pit and Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	13,395	0.75	0.32
	<i>Indicated</i>	108,271	1.04	3.61
	<i>Measured+Indicated</i>	121,666	1.00	3.93
	<i>Inferred</i>	25,344	1.33	1.08
Non-Refractory	<i>Measured</i>	9,887	0.63	0.20
	<i>Indicated</i>	67,470	1.01	2.18
	<i>Measured+Indicated</i>	77,356	0.96	2.38
	<i>Inferred</i>	18,968	1.36	0.83
Refractory	<i>Measured</i>	3,508	1.08	0.12
	<i>Indicated</i>	40,801	1.09	1.43
	<i>Measured+Indicated</i>	44,309	1.09	1.55
	<i>Inferred</i>	6,376	1.24	0.25

Albyn Open Pit Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	13,384	0.75	0.32
	<i>Indicated</i>	105,268	1.02	3.45
	<i>Measured+Indicated</i>	118,651	0.99	3.77
	<i>Inferred</i>	18,380	1.07	0.64
Non-Refractory	<i>Measured</i>	9,887	0.63	0.20
	<i>Indicated</i>	65,472	0.98	2.06
	<i>Measured+Indicated</i>	75,358	0.93	2.26
	<i>Inferred</i>	13,342	0.99	0.43
Refractory	<i>Measured</i>	3,497	1.08	0.12
	<i>Indicated</i>	39,796	1.09	1.39
	<i>Measured+Indicated</i>	43,293	1.09	1.52
	<i>Inferred</i>	5,038	1.29	0.21

Albyn Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	–	–	–
	<i>Indicated</i>	1,998	2.00	0.13
	<i>Measured+Indicated</i>	1,998	2.00	0.13
	<i>Inferred</i>	5,626	2.23	0.40
Non-Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	1,998	2.00	0.13
	<i>Measured+Indicated</i>	1,998	2.00	0.13
	<i>Inferred</i>	5,626	2.23	0.40
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

Pioneer Open Pit and Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	26,118	0.76	0.64
	<i>Indicated</i>	183,373	0.73	4.32
	<i>Measured+Indicated</i>	209,491	0.74	4.96
	<i>Inferred</i>	106,875	0.47	1.63
Non-Refractory	<i>Measured</i>	10,825	0.71	0.25
	<i>Indicated</i>	36,220	0.88	1.02
	<i>Measured+Indicated</i>	47,046	0.84	1.27
	<i>Inferred</i>	67,104	0.37	0.80
Refractory	<i>Measured</i>	15,293	0.80	0.39
	<i>Indicated</i>	147,152	0.70	3.30
	<i>Measured+Indicated</i>	162,445	0.71	3.69
	<i>Inferred</i>	39,771	0.65	0.83

Pioneer Open Pit Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	25,763	0.67	0.56
	<i>Indicated</i>	180,684	0.67	3.88
	<i>Measured+Indicated</i>	206,447	0.67	4.44
	<i>Inferred</i>	105,777	0.44	1.51
Non-Refractory	<i>Measured</i>	10,471	0.49	0.16
	<i>Indicated</i>	34,713	0.70	0.78
	<i>Measured+Indicated</i>	45,183	0.65	0.94
	<i>Inferred</i>	66,603	0.34	0.73
Refractory	<i>Measured</i>	15,293	0.80	0.39
	<i>Indicated</i>	145,971	0.66	3.10
	<i>Measured+Indicated</i>	161,264	0.67	3.49
	<i>Inferred</i>	39,173	0.61	0.77

Pioneer Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	355	7.40	0.08
	<i>Indicated</i>	2,689	5.08	0.44
	<i>Measured+Indicated</i>	3,044	5.35	0.52
	<i>Inferred</i>	1,098	3.45	0.12
Non-Refractory	<i>Measured</i>	355	7.40	0.08
	<i>Indicated</i>	1,508	4.93	0.24
	<i>Measured+Indicated</i>	1,862	5.40	0.32
	<i>Inferred</i>	501	4.00	0.06
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	1,181	5.27	0.20
	<i>Measured+Indicated</i>	1,181	5.27	0.20
	<i>Inferred</i>	598	2.98	0.06

Reserves & Resources continued

Pokrovskiy Open Pit and Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	5,009	1.11	0.18
	<i>Indicated</i>	22,148	0.72	0.51
	<i>Measured+Indicated</i>	27,157	0.79	0.69
	<i>Inferred</i>	36,709	0.40	0.47
Non-Refractory	<i>Measured</i>	5,009	1.11	0.18
	<i>Indicated</i>	22,148	0.72	0.51
	<i>Measured+Indicated</i>	27,157	0.79	0.69
	<i>Inferred</i>	36,709	0.40	0.47
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

Pokrovskiy Open Pit Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	4,182	0.70	0.09
	<i>Indicated</i>	20,951	0.62	0.42
	<i>Measured+Indicated</i>	25,134	0.63	0.51
	<i>Inferred</i>	36,203	0.36	0.42
Non-Refractory	<i>Measured</i>	4,182	0.70	0.09
	<i>Indicated</i>	20,951	0.62	0.42
	<i>Measured+Indicated</i>	25,134	0.63	0.51
	<i>Inferred</i>	36,203	0.36	0.42
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

Pokrovskiy Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	827	3.20	0.09
	<i>Indicated</i>	1,196	2.45	0.09
	<i>Measured+Indicated</i>	2,023	2.76	0.18
	<i>Inferred</i>	506	2.96	0.05
Non-Refractory	<i>Measured</i>	827	3.20	0.09
	<i>Indicated</i>	1,196	2.45	0.09
	<i>Measured+Indicated</i>	2,023	2.76	0.18
	<i>Inferred</i>	506	2.96	0.05
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

Tokur Total Mineral Resources (all open pit)

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz Au)
Total	<i>Measured</i>	11,952	1.30	0.50
	<i>Indicated</i>	16,096	1.06	0.55
	<i>Measured+Indicated</i>	28,048	1.16	1.05
	<i>Inferred</i>	10,706	1.09	0.38
Non-Refractory	<i>Measured</i>	11,952	1.30	0.50
	<i>Indicated</i>	16,096	1.06	0.55
	<i>Measured+Indicated</i>	28,048	1.16	1.05
	<i>Inferred</i>	10,706	1.09	0.38
Refractory	<i>Measured</i>	–	–	–
	<i>Indicated</i>	–	–	–
	<i>Measured+Indicated</i>	–	–	–
	<i>Inferred</i>	–	–	–

Notes:

(1) Mineral Resources include Ore Reserves.

(2) Mineral Resource estimates for Pokrovskiy, Pioneer, Malomir and Albyn were prepared internally by the Group in accordance with JORC Code 2012 as an update of the April 2017 statement audited by WAI; Mineral Resources for Tokur were reviewed by WAI in 2010 in accordance with JORC Code 2004 and there have been no changes to the Tokur estimates since that date.

(3) Open Pit Mineral Resources for Pokrovskiy, Pioneer, Malomir and Albyn are constrained by conceptual open-pit shells at a US\$1,700/oz long term gold price; Tokur Mineral Resources have no open pit constraints.

(4) The cut-off grade for Mineral Resources for open pit mining varies from 0.25 to 0.50g/t depending on the type of mineralisation and proposed processing method.

(5) A cut-off grade of 1.5g/t is used to report Mineral Resources for potential underground mining at all sites with exception of Albyn; 1.0g/t cut-off was used at Albyn.

(6) Mineral Resources are not Reserves until they have demonstrated economic viability based on a feasibility or pre-feasibility study.

(7) Grade represents estimated contained metal in the ground and has not been adjusted for metallurgical recovery.

(8) Figures may not add up due to rounding.

Exploration Update

Pioneer

Exploration at North East Bakhmut (NE Bakhmut) focused on payshoots 1 and 2 to investigate the possibility of higher-grade underground mineralisation as well as supporting ongoing mining activities.

Highlights for the year included:

- Two drill holes intersected mineralisation 30 to 70m below the pit floor at NE Bakhmut 1, confirming mineralisation extends well below the current open pit, with significant intersections of: 14.2m@1.17g/t (C-6334), 7.2m@3.77g/t (C-1083) and 5.3m@1.36g/t (C-1083);
- The technical team is currently evaluating the possibility of deepening the NE Bakhmut 1 pit; and
- Stope definition drilling and production grade control sampling completed at NE Bakhmut 2 resulted in underground resources increasing from c.127 to c.142koz.

Deep drilling at the Nikolaevskaya zone resulted in the discovery of further downdip extensions of the orebody and an increase in the mineral resource potential for underground mining.

Deep in-fill drilling at the central section of the Andreevskaya zone hit a payshoot with the best intersection grading 58.23g/t over a thickness of 11.2m. Since this is an in-fill drill hole it does not extend the Andreevskaya ore body, but demonstrates the existence of extremely high-grade pockets of mineralisation which would not have been detected by 40x40m drill grid. Historically, the Andreevskaya open pit has produced approximately 25% more gold than expected due to this effect. As a result, the existing Andreevskaya underground resource and reserve estimates are likely to be conservative.

Albyn

Resource expansion drilling on the periphery of Elginskoye has extended known gold mineralisation in the south-west, south-east and north, resulting in a 23% increase in Reserves compared to the previous year.

Drilling at Sukholozhskiy, 500m west of the Albyn open pit, intersected high-grade mineralisation, with the best intersection being 2.5m@12.26g/t.

Note: unless stated otherwise all thicknesses quoted are apparent.

Malomir

In-fill drilling at Quartzitovoye confirmed the presence of a bulk stockwork to the west of the Ore Body 55. This was previously considered to be a target for underground mining linked to the Quartzitovoye underground mine. However, the stockwork increasingly appears to be an attractive target for an open pit mine that would replace the Quartzitovoye underground mine once depleted.

Drilling at Osipkan, a Tokur satellite located 130km away from Malomir, has identified two zones equivalent to Inferred under JORC gold resources, including 97koz (2.5Mt @ 1.23g/t) and 22koz (458kt @ 1.50g/t).

Other Projects

Early stage exploration at the Chogarskaya and Verkhne-Udskaya licences in the Khabarovsk region yielded some promising results, including grab samples from the Chogarskaya licence returning grades of up to 22.1g/t. At the Verkhne-Udskaya licence, the average grade for mineralised trench samples is c.1g/t, whilst grab samples taken from the areas not yet trenched have shown grades of up to 10g/t.

Preliminary metallurgical tests suggest gold mineralisation at Verkhne-Udskaya is non-refractory.

Post Year End Events

In February 2020, the Group acquired exploration assets at Mariinskiy comprising two adjacent exploration licences with a total area of c.155km² located c.30km north-east of Malomir and c.50km west from Tokur.

These licences cover an area where extensive historical alluvial mining has taken place over a strike length of c.18km.

Historical exploration work has identified at least 30 quartz veins with gold grades of up to 10g/t, as well as disseminated gold mineralisation with grades of up to 2.5g/t.

The Company's in-house exploration team believe that this asset has the potential to contain substantial gold resources, of a similar scale and nature to known orebodies at Malomir including its satellites.

2020 Exploration Outlook

At Elginskoye, exploration will continue to de-risk and grow the reserves.

At Unglichikanskoye, exploration will resume with the objective of expanding reserves.

Exploration at Tokur and Osipkan will focus on verifying historical exploration results and preparing a maiden reserve estimate.

Further exploration of resources which have the potential for underground mining at Malomir.

Early stage exploration will continue at the promising Mariinskiy area.

Further greenfield exploration will take place at Chogarskaya and Verkhne-Udskaya.

IRC produces and develops industrial commodities. Based in the Russian Far East, it benefits from low production costs and proximity to China, the world's largest consumer of IRC's main product, iron ore. IRC was part of Petropavlovsk's Non-Precious Metal Division before it was listed on The Stock Exchange of Hong Kong in 2010 (ticker: 1029.HK) as a separate entity. In March 2020, Petropavlovsk entered into a non-binding preliminary agreement with Stocken Board AG to dispose of 29.9% of IRC for consideration of US\$10 million.

IRC Assets

IRC's key mining assets are K&S and Kuranakh:

- K&S: a mine producing 65% iron ore concentrate, located in the Jewish Autonomous Region (EAO) of the Russian Far East. The project is currently in phase one of two phases, and once ramped up, is expected to have a full annual capacity of 3.2Mtpa; and
- Kuranakh: a mine producing iron ore / ilmenite concentrate located in the Amur region, Russian Far East, currently in care and maintenance and under administration.

IRC's non-core mining assets include:

- Bolshoi Seym: an ilmenite deposit located north of Kuranakh;
- The Garinskoye flanks: which is at an early stage of exploration; and
- Kostenginskoye: an area 18km south of K&S which is at an early stage of exploration.

Operational Performance in 2019

K&S

In 2019, IRC continued with phase one ramp up of K&S, transitioning from a development project into a cash generating mine. Once fully ramped up, phase one is expected to result in the production of 3.2Mtpa of iron ore concentrate with a 65% iron (Fe) content. Iron ore prices continued rising in 2019, with the benchmark 65% Fe Platts spot price index averaging US\$104/t.

Annual iron ore concentrate production increased 15% to 2.6Mt, with the plant operating at a steady state capacity of c.81%. In October 2019, the K&S plant achieved a significant milestone by successfully operating at full capacity, despite disruption in August due to adverse weather conditions. Q4 2019 capacity was temporarily affected by technical

issues with the ball mills, rectified in December, allowing K&S to resume its normal production rate and commence the use of the Drying Unit in time for the winter production period.

At the end of March 2019, the Amur River Bridge was connected. Once the bridge is operational, it will further reduce congestion and shorten shipment times to IRC's Chinese customers from 7-10 days to 3-5 days, saving IRC c.US\$5/t.

Kuranakh

In response to a challenging operating environment and lower iron ore prices, Kuranakh was moved to care and maintenance in 2016. As a result, there were no sales of iron ore concentrate or ilmenite in 2019.

The care and maintenance programme involves limiting costs by minimising headcount responsible for maintenance and security. Prior to being moved to care and maintenance, Kuranakh produced c.1.2Mt of iron ore concentrate and 0.2Mt of ilmenite per annum. During Q4 2019, Kuranakh was placed under administration with the option to re-open the plant should the iron ore market upside prevail.

Refinancing of the ICBC Project Finance Facility

In December 2018, IRC announced the agreement of a US\$240 million facility with Gazprombank to repay in full K&S's outstanding loan facility with ICBC (US\$169 million). The ICBC facility was originally entered into by IRC in 2010 to fund development of the K&S deposit.

In March 2019, refinancing of the ICBC loan was successfully completed and the facility fully drawn down and used to repay the outstanding ICBC facility, two bridge loans as well as c.US\$6 million in fees related to the guarantee provided by Petropavlovsk.

Proposed Termination of IRC Guarantees and Disposal of Petropavlovsk's Shareholding

On 18 March 2020, Petropavlovsk signed a preliminary agreement with Stocken Board AG (Stocken) as the first step towards the termination of and release of Petropavlovsk from all loan guarantees given to Gazprombank in relation to IRC and disposal of Petropavlovsk's 29.9% equity holding in IRC for a cash consideration of US\$10 million (or lesser amount to reflect any dilution caused through an issuance of IRC shares). Upon Gazprombank giving its consent for Petropavlovsk to reduce its stake in IRC, the

preliminary agreement becomes a binding SPA and its completion is dependent on two conditions:

- Termination and release of Petropavlovsk from all loan guarantees given to Gazprombank in relation to IRC; and
- The receipt of any consents that may be required from the Petropavlovsk's noteholders or a confirmation by the Board that none are required.

Should Stocken be successful in relieving Petropavlovsk of the loan guarantees at any time within 180 days from entering into the SPA (which is extendable at Petropavlovsk's discretion), Petropavlovsk undertakes to transfer the 29.9% holding in IRC to Stocken in return for a cash payment of US\$10 million payable up to 31 December 2021. Until full payment of the US\$10 million has been received, Stocken has an option ("Option") which allows it to return the 29.9% holding to Petropavlovsk. If the Option is exercised, there would be no effect on the guarantee release and the IRC shares which Petropavlovsk transferred to Stocken will be returned to Petropavlovsk without the guarantees attached and any consideration paid up to that date will be refunded to Stocken. The Option also protects Petropavlovsk in the event of a deterioration in IRC's financial performance during this period, such that Stocken would be unable to exercise the option if any of the following thresholds are breached with respect to IRC's financial performance: (i) Net debt of less than US\$275 million, (ii) Net debt / EBITDA ratio which is 35% above that on the date of the SPA, and (iii) IRC's market capitalisation not to fall below 50% of the market capitalisation as at the date of the SPA.

FY 2019 Financial Results

In 2019, IRC reported iron ore concentrate sales of over 2.4Mt, a c.11% increase compared to 2018, at a selling price of US\$71/t (2018: US\$68/t). Due to increased sales, IRC reported a c.31% increase in revenue before hedging losses totalling US\$200 million (2018: US\$153 million). The positive operational performance resulted in a 39% increase in adjusted EBITDA (excluding foreign exchange), to US\$33 million (2018: US\$24 million).

Key Performance Indicators

Revenue (US\$ million)

2019	741.6
2018	499.8
2017	587.4

Definition

Revenue is the fair value of the consideration received or receivable through the sales of gold and silver as well as the rendering of services by the Group's various in-house companies.

Relevance

Revenue is an indicator of the Group's ability to generate operating cash flows which are a source of funding for the Group's working capital requirements, capital expenditure and debt service obligations.

Performance in 2019

Group revenue during the period increased by 48% to US\$741.6 million (2018: US\$499.8 million), due to higher gold sales volumes and an improved average realised gold price. Gold remains the key commodity produced and sold by the Group, comprising 93% of total revenue generated in 2019. Physical volume of gold sold increased by 39% from 369,611oz in 2018 to 514,005oz in 2019, at average realised gold price of US\$1,346/oz (2018: US\$1,263/oz) inclusive of a US\$(61)/oz effect from hedge arrangements (2018: US\$(9)/oz). In addition, the Group sold 56,568oz of silver in 2019 at an average price of US\$15/oz, compared to 54,746oz in 2018 at an average price of US\$15/oz. Revenue generated by the Group's in-house service companies increased by 68% to US\$49.0 million in 2019 (2018: US\$29.1 million). This revenue stream is substantially attributable to sales generated by the Group's engineering and research institute, Irgiredmet, primarily through engineering services and the procurement of materials, consumables and equipment for third parties.

Going forward

The Company is targeting 2020 gold production of between 620koz and 720koz, with total revenue largely dependent on the average realised gold sales price during the period.

For further information on Revenue please refer to the CFO Statement on pages [72](#) to [82](#) of this report.

Total Cash Costs* per Ounce of Gold for Hard-Rock Mines (US\$/oz)

2019	749
2018	678
2017	741

Definition

Total cash cost per ounce ("TCC") is the cost of producing and selling an ounce of gold from the Group's hard-rock mines (Pioneer, Malomir and Albyn) and the processing and selling an ounce of gold by the treatment of third-party sourced refractory concentrate at the POX Hub. The Group's hard-rock mines are its key assets, accounting for approximately 90% of the Group's total gold production in 2019.

TCC* are calculated by the Group as operating cash costs less co-product revenue. TCC* per oz are calculated as Total Cash Costs* divided by ounces of gold sold and are presented on a segmental basis.

Operating cash costs are defined by the Group as operating cash expenses plus refinery and transportation costs, other taxes and mining tax.

The key components of the operating cash expenses are wages, electricity, diesel, chemical reagents and consumables.

The key cost drivers affecting the operating cash expenses are production volumes of ore mined and processed, grades of ore processed, recovery rates, cost inflation and fluctuations in the Rouble to US Dollar exchange rate. Refinery and transportation costs are variable costs dependent on production volume. Mining tax is also a variable cost dependent on production volumes and the gold price realised.

The Russian statutory mining tax rate is 6%. Under the Russian Federal Law 144-FZ dated 23 May 2016 that introduced certain amendments to the Russian Tax Code, taxpayers who are participants in Regional Investment Projects ("RIP") have the right to apply the reduced mining tax rate provided certain conditions are met. LLC Malomirskiy Rudnik and LLC Albynskiy Rudnik met eligibility criteria and applied 1.2% mining tax rate in 2019, while JSC Pokrovskiy Rudnik applied full mining tax rate in 2019, resulting in US\$15.9 million mining tax expense compared to nil in 2018 when 0% mining tax rate was applied by the Group.

Relevance

The Group closely monitors its current and projected costs to track and benchmark the ongoing efficiency and effectiveness of its operations. This monitoring includes analysing fluctuations in the components that constitute cash costs and cost per tonne mined and processed to identify whether and where efficiencies may be made.

Performance in 2019

Total Cash Costs* for hard-rock mines increased from US\$678/oz in 2018 to US\$749/oz in 2019. The increase in TCC* primarily reflects the effect of inflation of certain Rouble denominated costs, costs associated with the ramp-up of the POX Hub and Malomir flotation, application of the full 6% mining tax rate at Pioneer and progressive increase in mining tax rate to 1.2% at Albyn and Malomir. This effect was partially mitigated by higher grades of non-refractory ore processed at Pioneer, Albyn and Malomir and higher recoveries achieved at Pioneer and Malomir as well as by the effect of Rouble depreciation.

Going forward

The Group expects TCC* for 2020 to be in the range of c.US\$700 – US\$800/oz, excluding third-party concentrate, as the price of concentrate depends on the volatility of the gold price.

For further information on TCC* please refer to the CFO Statement on pages [72](#) to [82](#) of this report.

◆ Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages [256](#) to [262](#) for further information on our APMs.

Our key performance indicators appear throughout this report and introduce the operational, financial and sustainable development sections; respectively pages [42](#), [70](#) and [86](#).

All-in Sustaining Costs* (US\$/oz)

2019	1,020
2018	1,079
2017	963

Definition

All-in sustaining cash costs ("AISC") include both operating and capital costs required to sustain gold production on an ongoing basis, over and above the direct mining and selling costs shown by TCC*. AISC* are calculated in accordance with guidelines for reporting AISC*, as published by the World Gold Council.

Relevance

AISC* allows for a better understanding of the true cost of producing gold once key components such as central admin costs and the cost of sustaining capital and exploration expenditure are taken into account. Management uses this measure to monitor the performance of our assets and their ability to generate positive cash flows.

Performance in 2019

AISC* decreased from US\$1,079/oz in 2018 to US\$1,020/oz in 2019. The decrease primarily reflects reversal of impairment of non-refractory ore stockpiles at Albyn, as well as an increase in physical ounces sold in 2019 with an aggregate of sustaining exploration and capital expenditures related to the existing mining operations and underground mining projects at Pioneer and Malomir, Malomir flotation plant and capitalised stripping expenditure during the period remaining at a similar level to 2018. This effect was partially offset by an increase in TCC.

Going forward

The Group expects AISC* for 2020 to be in line with changes in TCC.

For further information on AISC* please refer to the CFO Statement on pages [72](#) to [82](#) of this report.

Underlying EBITDA (US\$ million)

2019	264.8
2018	182.7
2017	196.8

Definition

EBITDA is a common measure used to assess profitability without the impact of different financing methods, tax, asset depreciation and amortisation of intangibles and items of an exceptional / non-recurring nature, or those that could make comparison of results from prior periods less meaningful.

Relevance

Underlying EBITDA* is an indicator of the Group's ability to generate operating cashflows, which are the source of funding for the Group's working capital requirements, Capital Expenditure* and debt service obligations. It is also widely used by various stakeholders.

Performance in 2019

In 2019, the Group generated Underlying EBITDA of US\$264.8 million, compared with US\$182.7 million in 2018. The 2019 figure represents a 45% increase in Underlying EBITDA primarily due to an increase in physical ounces of gold sold at a higher average realised gold price compared to the same period in 2018, partially offset by a rise in TCC*.

Going forward

The Group aims to continue to produce and sell gold at competitive margins, which will, amongst other factors, influence the Group's future Underlying EBITDA* levels.

For further information on Underlying EBITDA* please refer to the CFO Statement on pages [72](#) to [82](#) of this report.

Profit / (Loss) For The Period (US\$ million)

2019	25.7
2018	25.9
2017	37.1

Definition

Profit / (loss) for the period is calculated by deducting operating and net finance expenses, taxation and any relevant share of results of associates for the applicable years from total revenue.

Relevance

Profit / (loss) for the period is often referred to as the 'bottom line' of the income statement and is the income attributable on a per share basis when it is divided by the weighted average number of shares outstanding during the reporting period.

Performance in 2019

Profit for the period amounted to US\$25.7 million in 2019, compared to a profit of US\$25.9 million in 2018. The Group's profit for the period was driven by higher underlying EBITDA of US\$264.8 million (2018: US\$182.7 million), as well as net impairment gains on financial instruments totalling US\$30.8 million (2018: US\$28.6 million net impairment losses), partially offset by lower impairment reversal of mining assets and in-house services totalling US\$52.2 million (2018: US\$101.7 million).

Going forward

The Group aims to continue to produce and sell gold at competitive margins, which will, amongst other factors, influence the Group's future profit / (loss) for the period.

◆ Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages [256](#) to [262](#) for further information on our APMs.

CFO Statement

For the year ended 31 December 2019

Note: Figures may not add up due to rounding

Financial Highlights

		2019	2018 ^(a)
Gold produced	'000oz	517.3	422.3
Gold sold	'000oz	514.0	369.6
Group revenue	US\$ million	741.6	499.8
Average realised gold price [♦]	US\$/oz	1,346	1,263
Average LBMA gold price afternoon fixing	US\$/oz	1,393	1,269
Total Cash Costs ^{♦ (a),(c)}	US\$/oz	749	678
All-in Sustaining Costs ^{♦ (b),(c)}	US\$/oz	1,020	1,079
All-in Costs ^{♦ (b)}	US\$/oz	1,103	1,332
Underlying EBITDA ^{♦ (c)}	US\$ million	264.8	182.7
Operating profit	US\$ million	115.4	126.6
Profit before tax	US\$ million	52.9	82.4
Profit for the year	US\$ million	25.7	25.9
Profit for the year attributable to equity shareholders of Petropavlovsk PLC	US\$ million	26.9	24.5
Basic profit per share	US\$	0.01	0.01
Cash generated from operations before working capital changes	US\$ million	250.5	162.3
Net cash from operating activities	US\$ million	95.4	264.2

(a) Calculation of Total Cash Costs[♦] ("TCC") is set out in the section hard-rock mines section below.

(b) All-in Sustaining Costs[♦] ("AISC") and All-in Costs[♦] ("AIC") are calculated in accordance with guidelines for reporting All-in Sustaining Costs[♦] and All-in Costs[♦] published by the World Gold Council. Calculation is set out in the section All-in Sustaining Costs[♦] and All-in Costs[♦] below.

(c) Following a review of the nature of the deferred stripping costs the Group has made a reclassification of deferred stripping costs balance from the Inventory balance into the Mining assets within Property, plant and equipment. Comparative information on TCC, AISC and EBITDA for 2018 have been re-calculated accordingly to reflect the effect of the aforementioned re-classification.

	31 December 2019 US\$ million	31 December 2018 US\$ million
Cash and cash equivalents	48.2	26.2
Notes ^(d)	(500.4)	(499.0)
Convertible bonds ^(e)	(109.1)	(95.2)
Net debt [♦]	(561.3)	(568.0)

(d) US\$500 million Guaranteed Notes due on 14 November 2022 at amortised cost.

(e) US\$125 million convertible bonds due on 03 July 2024 at amortised cost.

Revenue

	2019 US\$ million	2018 US\$ million
Revenue from hard-rock mines	692.6	470.7
Revenue from other operations	49.0	29.1
	741.6	499.8

Group revenue during the period was US\$741.6 million, 48% higher than the US\$499.8 million achieved in 2018.

Revenue from hard-rock mines during the period was US\$692.6 million, 47% higher than the US\$470.7 million achieved in 2018. Gold remains the key commodity produced and sold by the Group, comprising 93% of total revenue generated in 2019. The physical volume of gold sold from hard-rock mines increased by 39% from 369,611 oz in 2018 to 514,005 oz in 2019. The average realised gold price[♦] increased by 7% from US\$1,263/oz in 2018 to US\$1,346/oz in 2019. The average realised gold price[♦] includes a US\$(61)/oz effect from hedge arrangements (2018: US\$(9)/oz).

Hard-rock mines sold 56,568oz of silver in 2019 at an average price of US\$15/oz, compared to 54,746oz in 2018 at an average price of US\$15/oz.

♦ Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages 256 to 262 for further information on our APMs.

Revenue generated as a result of third-party work by the Group's in-house service companies was US\$49.0 million in 2019, a US\$19.9 million increase compared to US\$29.1 million in 2018. This revenue is substantially attributable to sales generated by the Group's engineering and research institute, Irgiredmet, primarily through engineering services and the procurement of materials, consumables and equipment for third parties, which comprised US\$45.1 million in 2019 compared to US\$25.1 million in 2018.

Cash flow hedge arrangements

In order to increase certainty in respect of a significant proportion of its cash flows, the Group has entered into a number of gold forward contracts.

Forward contracts to sell an aggregate of 230,000oz of gold matured during the 2019 and resulted in a US\$(31.5) million net cash settlement by the Group (2018: US\$(3.4) million net cash settlement paid

by the Group on forward contracts to sell an aggregate of 200,000oz of gold).

The Group constantly monitors the gold price and hedges some portion of production as considered appropriate. All forward contracts were realized in 2019 and the Group had no open hedge positions as at 31 December 2019.

Underlying EBITDA[♦] and analysis of operating costs

	2019 US\$ million	2018 US\$ million
Profit for the year	25.7	25.9
Add/(less):		
Net (impairment reversals)/ impairment losses on financial instruments	(30.8)	28.6
Investment and other finance income	(8.8)	(3.8)
Interest expense	59.9	29.5
Net other finance losses/(gains)	42.2	(10.2)
Foreign exchange losses/(gains)	20.8	(8.5)
Taxation	27.2	56.5
Depreciation	137.8	142.0
Impairment of exploration and evaluation assets	–	12.2
(Reversal of impairment)/impairment of ore stockpiles	(2.8)	18.0
Impairment of gold in circuit	0.1	2.1
Reversal of impairment of mining assets and in-house service	(52.2)	(101.7)
Share of results of associate ^(a)	45.7	(8.1)
Underlying EBITDA[♦]	264.8	182.7

(a) Group's share of interest expense, investment income, other finance gains and losses, foreign exchange gains/losses, taxation, depreciation and impairment/reversal of impairment recognised by an associate (IJC).

Underlying EBITDA[♦] as contributed by business segments is set out below.

	2019 US\$ million	2018 US\$ million
Pioneer	53.3	64.0
Pokrovskiy	–	(0.5)
Malomir	104.2	48.3
Albyn	149.3	104.8
Total hard-rock mines	306.8	216.8
Corporate and other	(41.9)	(34.0)
Underlying EBITDA[♦]	264.8	182.7

Hard-rock mines

During this period, the hard-rock mines generated Underlying EBITDA[♦] of US\$306.8 million compared to US\$216.8 million Underlying EBITDA[♦] in 2018.

Total Cash Costs[♦] for hard-rock mines increased from US\$678/oz in 2018 to US\$749/oz in 2019. The increase in TCC[♦] primarily reflects the effect of inflation of certain Rouble denominated costs, costs associated with the ramp-up of the POX Hub and Malomir flotation, application of the full

6% mining tax rate at Pioneer and progressive increase in mining tax rate to 1.2% at Albyn and Malomir. This effect was partially mitigated by higher grades of non-refractory ore processed at Pioneer, Albyn and Malomir and higher recoveries achieved at Pioneer and Malomir as well as by the effect of Rouble

[♦] Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages 256 to 262 for further information on our APMs.

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depreciation. The increase in physical ounces sold from 369,611oz in 2018 to 514,005oz in 2019 resulted in US\$84.4 million increase in the Underlying EBITDA*. The increase in the average realized gold price* from US\$1,263/oz in 2018 to US\$1,346/oz in 2019 contributed to a further US\$42.7 million increase in the Underlying EBITDA*. This effect was partly mitigated by the increase in TCC* with US\$(36.5) million effect on the Underlying EBITDA*.

The key components of the operating cash expenses are wages, electricity, diesel, chemical reagents and consumables, as set out in the table below. The key cost drivers affecting the operating cash expenses are production volumes of ore mined and processed, grades of ore processed,

recovery rates, cost inflation and fluctuations in the Rouble to US Dollar exchange rate.

Compared with 2018 there was ongoing inflation of certain Rouble denominated costs, in particular, electricity costs increased by 3% in Rouble terms (no changes in US Dollar terms) and the cost of diesel increased by 12% in Rouble terms (increased by 8% in US Dollar terms). The Rouble depreciated against the US Dollar by 3% in 2019 compared to 2018, with the average exchange rate for the year of RUB64.69 : US\$1 in 2019 compared to RUB62.68 : US\$1 in 2018, somewhat mitigating the effect of Rouble denominated costs inflation.

Refinery and transportation costs are variable costs dependent on production volume.

Mining tax is also a variable cost dependent on production volume and the gold price realised. The Russian statutory mining tax rate is 6%. Under the Russian Federal Law 144-FZ dated 23 May 2016 that introduced certain amendments to the Russian Tax Code, taxpayers who are participants in Regional Investment Projects ("RIP") have the right to apply the reduced mining tax rate provided certain conditions are met. LLC Malomirskiy Rudnik and LLC Albynskiy Rudnik met eligibility criteria and applied 1.2% mining tax rate in 2019 while JSC Pokrovskiy Rudnik applied full mining tax rate in 2019, resulting in US\$15.9 million mining tax expense compared to nil in 2018 when 0% mining tax rate was applied by the Group.

	2019		2018	
	US\$ million	%	US\$ million	%
Staff cost	83.2	21	62.8	24
Materials	86.6	22	87.4	34
Flotation concentrate purchased	74.0	19	-	-
Fuel	43.3	11	39.9	16
Electricity	34.0	8	25.9	10
Other external services	42.3	11	17.9	7
Other operating expenses	32.0	8	21.8	9
	395.5	100	255.7	100
Movement in ore stockpiles, gold in circuit, bullion in process, limestone and flotation concentrate attributable to gold production	(34.2)		(8.6)	
Total operating cash expenses	361.4		247.1	

* Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages 256 to 262 for further information on our APMs.



	Hard-rock mines			2019	2018
	Pioneer US\$ million	Malomir US\$ million	Albyn US\$ million	Total US\$ million	Total US\$ million
Revenue					
Gold	223.2	239.4	229.1	691.7	466.7
Including:					
Gold from 3d parties concentrate	62.9	–	–	62.9	–
Silver	0.5	0.3	0.1	0.9	0.8
Flotation concentrate	–	–	–	–	3.2
	223.7	239.6	229.3	692.6	470.7
Expenses					
Operating cash expenses	158.2	128.1	75.0	361.4	247.1
Refinery and transportation	0.3	0.3	0.3	0.9	0.6
Other taxes	1.5	4.2	1.9	7.6	6.2
Mining tax	10.3	2.8	2.9	15.9	–
Depreciation	41.2	46.5	48.1	135.9	141.6
Reversal of impairment of mining assets	(42.8)	–	–	(42.8)	(83.0)
Impairment of exploration and evaluation assets	–	–	–	–	12.2
Impairment/(reversal of impairment) of ore stockpiles and gold in circuit	0.6	0.7	(4.0)	(2.7)	20.1
Operating expenses	169.4	182.7	124.2	476.3	344.9
Result of precious metals operations	54.3	56.9	105.1	216.3	125.8
Add/(less):					
Depreciation	41.2	46.5	48.1	135.9	141.6
Reversal of impairment of mining assets	(42.8)	–	–	(42.8)	(83.0)
Impairment of exploration and evaluation assets	–	–	–	–	12.2
Impairment/(reversal of impairment) of ore stockpiles and gold in circuit	0.6	0.7	(4.0)	(2.7)	20.1
Segment EBITDA♦	53.3	104.2	149.3	306.8	216.8
Physical volume of gold sold, oz	163,398	179,791	170,817	514,005	369,611
Including:					
Physical volume of gold sold from 3d parties concentrate, oz	42,442	–	–	42,442	–
Cash costs					
Operating cash expenses	158.2	128.1	75.0	361.4	247.1
Refinery and transportation	0.3	0.3	0.3	0.9	0.6
Other taxes	1.5	4.2	1.9	7.6	6.2
Mining tax	10.3	2.8	2.9	15.9	–
Operating cash costs	170.3	135.4	80.0	385.8	254.0
Deduct: co-product revenue	(0.5)	(0.3)	(0.1)	(0.9)	(0.8)
Deduct: cost of flotation concentrate	–	–	–	–	(2.6)
Total Cash Costs♦	169.9	135.2	79.9	384.9	250.6
Including:					
Total cash costs from 3d parties concentrate	53.4	–	–	53.4	–
TCC♦, US\$/oz	1,040	752	468	749	678

♦ Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages 256 to 262 for further information on our APMs.

CFO Statement continued

For the year ended 31 December 2019

All-in Sustaining Costs* and All-in Costs*

AISC* decreased from US\$1,079/oz in 2018 to US\$1,020/oz in 2019. The decrease in AISC* primarily reflects reversal of impairment of non-refractory ore stockpiles at Albyn as well as increase in physical ounces sold in 2019 with an aggregate of

sustaining exploration and capital expenditures related to the existing mining operations and underground mining projects at Pioneer and Malomir, Malomir flotation plant, and capitalized stripping expenditure during the period remaining at approximately the same level as in 2018. This effect was partially offset by the increase in TCC.

AIC* decreased from US\$1,332/oz in 2018 to US\$1,103/oz in 2019, reflecting the decrease in AISC* explained above, decrease in Capital Expenditure* in relation to the POX project, with POX Hub commissioned during the period and Pioneer flotation plant in development, as well as no perspective stripping expenditure capitalized in the period.

	Hard-rock mines			2019	2018
	Pioneer US\$ million	Malomir US\$ million	Albyn US\$ million	Total US\$ million	Total US\$ million
Physical volume of gold sold, oz	163,398	179,791	170,817	514,005	369,611
Total Cash Costs*	169.9	135.2	79.9	384.9	250.6
TCC*, US\$/oz	1,040	752	468	749	678
Impairment/(reversal of impairment) of ore stockpiles and gold in circuit	0.6	0.7	(4.0)	(2.7)	20.1
Adjusted operating costs	170.4	135.9	75.9	382.3	270.7
Central administration expenses	16.7	18.4	17.5	52.5	39.2
Capitalised stripping	14.5	12.7	–	27.1	33.0
Close down and site restoration	0.2	0.2	0.6	1.1	1.2
Sustaining exploration expenditures	4.0	0.1	0.0	4.1	18.5
Sustaining Capital Expenditure*	16.9	16.5	23.9	57.2	36.1
All-in Sustaining Costs*	222.7	183.7	117.9	524.3	398.7
All-in Sustaining Costs*, US\$/oz	1,363	1,022	690	1,020	1,079
Exploration expenditure*	0.7	1.1	8.4	10.1	3.1
Capital Expenditure*	22.2	10.2	–	32.4	76.7
Capitalised stripping	–	–	–	–	14.0
All-in Costs*	245.5	195.0	126.3	566.8	492.5
All-in Costs*, US\$/oz	1,503	1,085	739	1,103	1,332

Corporate and other

Corporate and other operations contributed US\$(41.9) million to Underlying EBITDA* in 2019 compared to US\$(34.0) million in 2018. Corporate and other operations primarily include central administration function, the results of in-house service companies and related charges, and the Group's share of results of its associate IRC.

The Group has corporate offices in London, Moscow and Blagoveschensk, which

together represent the central administration function. Central administration expenses increased by US\$13.3 million from US\$39.2 million in 2018 to US\$52.5 million in 2019.

The Group recognised US\$12.0 million share of IRC losses and a further US\$23.4 million impairment of investment in IRC (2018: US\$15.5 million share of profit generated by IRC, including US\$28.1 million effect from partial reversal of impairment at K&S mine

and US\$(5.7) million impairment of investment in IRC). IRC contributed US\$10.3 million to the Group's Underlying EBITDA* in 2019.

Impairment review

Impairment of mining assets

The Group undertook a review of impairment indicators and impairment reversal indicators of the tangible assets attributable to its gold mining projects and supporting in-house service companies. Detailed calculations of recoverable amounts, which are value-in-use

* Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages 256 to 262 for further information on our APMs.



calculations based on discounted cash flows, were prepared which concluded no impairment was required as at 31 December 2019 and 2018.

Having considered the excess of estimated recoverable amounts over the carrying values of the associated assets on the statement of financial position as at 31 December 2019 and taking into consideration removed uncertainty connected with the timing of the final construction and performance of the POX hub, the Directors concluded on the following:

- A reversal of impairment previously recorded against the carrying value of the

assets that are part of the Pioneer CGU would be appropriate. Accordingly, a pre-tax impairment reversal of US\$43.5 million (being a post-tax impairment reversal of US\$34.8 million) has been recorded against the associated assets within property, plant and equipment. The aforementioned impairment reversal takes into consideration the effect of depreciation attributable to relevant mining assets and intra-group transfers of previously impaired assets to Pioneer.

- A further reversal of impairment previously recorded against the carrying value of the assets of the supporting in-house service

companies would be appropriate. Accordingly, a pre-tax impairment reversal of US\$9.4 million (being a post-tax impairment reversal of US\$7.8 million) has been recorded against the associated assets within property, plant and equipment. The aforementioned impairment reversal takes into consideration the effect of depreciation attributable to relevant assets and intra-group transfers of previously impaired assets.

As at 31 December 2018, the Group recognised impairment reversals at the Malomir and Albyn CGUs of US\$83.0 million (US\$66.4 million post-tax) and US\$18.7 million (US\$15.2 million post-tax), respectively.

The key assumptions which formed the basis of forecasting future cash flows and the value in use calculation are set out below:

	2019	2018
Long-term real gold price	US\$1,400/oz	US\$1,300/oz
Discount rate ^(a)	7.0%	8.5%
RUB : US\$ exchange rate	RUB66 : US\$1	RUB67 : US\$1

(a) Being the post-tax real weighted average cost of capital, equivalent to a nominal pre-tax discount rate of 8.7% (2018: 12.5%).

Impairment of exploration and evaluation assets

As at 31 December 2019, the Group performed a review of its exploration and evaluation assets and concluded no impairment was required (31 December 2018: the Group performed a review of its

exploration and evaluation assets and concluded to suspend exploration at the Flanks of Malomir and surrender the relevant licences. An aggregate impairment charge of US\$12.2 million was recorded against associated exploration and evaluation assets).

As at 31 December 2019, all exploration and evaluation assets in the statement of financial position related to the areas adjacent to the existing mines with ongoing drilling and technical studies being performed.

Investment and other finance income

	2019 US\$ million	2018 US\$ million
Investment income	3.2	3.8
Guarantee fee income ^(a)	5.6	–
	8.8	3.8

(a) Guarantee fee income under Gazprombank Guarantee arrangements, as set out in section "Corporate activities" below.

The Group recognised US\$1.8 million interest income on loans granted and US\$1.4 million interest income on cash deposits with banks.

Interest expense

	2019 US\$ million	2018 US\$ million
Interest expense	71.6	62.8
Interest capitalised	(12.3)	(33.7)
Other	0.6	0.4
	59.9	29.5

CFO Statement continued

For the year ended 31 December 2019

Interest expense for the year comprised US\$42.0 million of effective interest on the Notes, US\$13.0 million of effective interest on the Convertible Bonds, US\$16.0 million of interest on prepayments on gold sale agreements and US\$0.6 million interest on finance lease (2018: US\$41.9 million of effective interest on the Notes, US\$12.6 million of effective interest on the Convertible Bonds, US\$1.1 million of effective interest on bank facilities and US\$7.2 million of interest on prepayments on gold sale agreements).

As the Group continued with completion of the POX Hub, this project met eligibility criteria for borrowing costs capitalisation under IAS 23 "Borrowing Costs". US\$12.3 million of interest expense was capitalised within property, plant and equipment (2018: US\$33.7 million interest capitalised within property, plant and equipment). With all four autoclaves of the POX Hub now fully functional, interest capitalisation in relation to POX Hub ceased in December 2019,

with increase in net interest expense from December 2019 onwards. Construction of the flotation line at Pioneer met eligibility criteria for borrowing costs capitalization with relevant interest to be capitalized going forward.

Net other finance gains/(losses)

Net other finance losses for the year totalled US\$(42.2) million compared to US\$10.2 million of net other finance gains in 2018.

Key elements of other finance gains and losses this period include:

- US\$(31.1) million fair value loss from re-measurement of the conversion option of the convertible bonds;
- US\$(11.2) million loss on repurchase of the Existing Bonds as set out in section "Corporate activities" below;
- US\$3.6 million gain from re-measurement of receivable from IRC under ICBC

Guarantee arrangements to fair value as set out in section "Corporate activities" below;

- US\$(2.0) million fair value loss on the call option to acquire 25% interest in the Group's subsidiary LLC TEMI from its current shareholder as set out in section "Corporate activities" below;
- US\$(1.5) million net loss on other items.

Net impairment reversals/(impairment losses) on financial instruments

In 2019, the Group recognised US\$2.3 million reversal of impairment of financial assets (2018: US\$3.2 million impairment losses of financial assets) and net of US\$28.5 million reversal of provision for expected credit losses under Gazprombank and ICBC guarantee arrangements (2018: US\$25.5 million provision for expected credit losses under ICBC guarantee arrangements), as set out in section "Corporate activities" below.

Taxation

	2019 US\$ million	2018 US\$ million
Tax charge	27.2	56.5

The Group is subject to corporation tax under the UK, Russia and Cyprus tax legislation. The statutory tax rate for 2019 was 19.0% in the UK and 20% in Russia. Under the Russian Federal Law 144-FZ dated 23 May 2016 taxpayers who are participants in Regional Investment Projects ("RIP") have the right to apply the reduced corporation tax rate over the period until 2027, subject to eligibility criteria. In 2019 and 2018, LLC Albynskiy Rudnik has received tax relief as a RIP participant and was entitled to the reduced statutory corporation tax rate of 17%. In 2019 LLC Malomirskiy Rudnik has received tax

relief as a RIP participant and was entitled to the reduced statutory corporation tax rate of 17%.

The tax charge for the year primarily related to the Group's gold mining operations and is represented by a current tax charge of US\$29.7 million (2018: US\$19.9 million) and a deferred tax credit, which is a non-cash item, of US\$2.4 million (2018: deferred tax charge of US\$36.6 million). Included in the deferred tax credit in 2019 is a US\$20.4 million credit (2018: US\$30.6 million charge) foreign exchange effect which primarily arises

because the tax base for a significant portion of the future taxable deductions in relation to the Group's property, plant and equipment are denominated in Russian Roubles, whilst the future depreciation charges associated with these assets will be based on their US Dollar carrying value.

During the period, the Group made corporation tax payments in aggregate of US\$32.7 million in Russia (2018: corporation tax payments in aggregate of US\$5.0 million in Russia).

Earnings per share

	2019	2018
Profit for the year attributable to equity holders of Petropavlovsk PLC	US\$26.9 million	US\$24.5 million
Weighted average number of Ordinary Shares	3,309,193,559	3,305,069,755
Basic profit per ordinary share	US\$0.01	US\$0.01

Basic profit per share for 2019 was US\$0.01 (2018: basic profit per share was US\$0.01). The total number of Ordinary Shares in issue as at 31 December 2019 was 3,310,210,281 (31 December 2018: 3,307,151,712).

Financial position and cash flows

	31 December 2019 US\$ million	31 December 2018 US\$ million
Cash and cash equivalents	48.2	26.2
Notes ^(a)	(500.4)	(499.0)
Convertible bonds ^(b)	(109.1)	(95.2)
Net debt [♦]	(561.3)	(568.0)

(a) US\$500 million Guaranteed Notes due on 14 November 2022 at amortised cost.

(b) US\$125 million convertible bonds due on 03 July 2024 at amortised cost.

	2019 US\$ million	2018 US\$ million
Net cash from operating activities	95.4	264.2
Net cash used in investing activities ^(c)	(84.7)	(233.5)
Net cash from/(used in) financing activities	8.9	(13.0)

(c) Including US\$103.8 million Capital Expenditure[♦] (2018: US\$134.4 million).

Key movements in cash and Net debt[♦]

	Cash US\$ million	Debt US\$ million	Net debt [♦] US\$ million
As at 1 January 2019	26.2	(594.2)	(568.0)
Net cash generated by operating activities before working capital changes	250.5		
Decrease in working capital ^(d)	(61.2)		
Corporation tax paid	(32.7)		
Capital Expenditure [♦]	(103.8)		
Capitalized stripping	(27.1)		
Repayment of loans granted to an associate	56.2		
Issue of Bonds, net of transaction costs	120.6	(107.8)	
Repurchase of the Existing Bonds	(108.0)	96.8	
Interest accrued		(55.0)	
Interest paid	(67.2) ^(e)	50.7	
Payment for the call option to acquire non-controlling 25% interest in the Group's subsidiary LLC TEMI	(13.0)		
ICBC Guarantee fee	6.0		
Interest received	3.3		
Other	(1.6)		
As at 31 December 2019	48.2	(609.5)	(561.3)

(d) Including an aggregate of US\$187.4 million advance payments received from Gazprombank and Sberbank outstanding as at 31 December 2019. Advance payments are to be settled against physical delivery of gold produced by the Group in regular intervals over the period of up to twelve months from the reporting date based on the sales price prevailing at delivery that is determined with reference to LBMA fixing.

(e) Including US\$16.0 million interest paid in relation to advance payments from Gazprombank and Sberbank.

Capital Expenditure[♦]

The Group invested an aggregate of US\$103.8 million in 2019 compared to US\$134.4 million in 2018. The key areas of focus in 2019 were on the POX project completion, exploration and development to support the underground mining at Pioneer and Malomir, expansion of tailings dams at Pioneer and Albyn and ongoing exploration related to the areas adjacent to the ore bodies of the Group's main mining operations. The Group capitalised US\$12.3 million of interest expense incurred in relation to the Group's debt into the cost of the POX Hub, Malomir flotation and Pioneer flotation (2018: US\$33.7 million into the cost of the POX Hub and Malomir flotation).

♦ Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages 256 to 262 for further information on our APMs.

CFO Statement continued

For the year ended 31 December 2019

	Exploration expenditure US\$ million	Development expenditure and other CAPEX* US\$ million	Total CAPEX* US\$ million
POX ^(a)	–	17.1	17.1
Pioneer ^{(b),(c)}	4.7	29.9	34.6
Malomir ^{(d),(e)}	1.2	14.1	15.2
Albyn ^(f)	8.4	21.6	30.0
Corporate and in-house services	–	6.9	6.9
	14.2	89.6	103.8

(a) Including US\$17.1 million of development expenditure in relation to the POX Hub which is considered to be non-sustaining Capital Expenditure* for the purposes of calculating AISC* and AIC*.

(b) Including US\$8.8 million of expenditure in relation to the underground mining project at Pioneer to be sustaining Capital Expenditure* for the purposes of calculating AISC* and AIC*.

(c) Including US\$15.2 million development expenditure in relation to the Pioneer flotation (including tailing dams) to be non-sustaining Capital Expenditure for the purposes of calculating the AISC* and AIC*.

(d) Including US\$2.8 million of development expenditure in relation to the underground mining project at Malomir to be sustaining Capital Expenditure* for the purposes of calculating AISC* and AIC*.

(e) Including US\$8.2 million of development expenditure in relation to Malomir flotation (including tailing dams), which is considered to be sustaining Capital Expenditure* for the purposes of calculating AISC* and AIC*.

(f) Including US\$10.1 million of development expenditure in relation to Albyn tailing dams and US\$5.3 million in relation to road between Elginskoye and Albyn processing facilities, which are considered to be sustaining Capital Expenditure for the purposes of calculating AISC and AIC.

Foreign currency exchange differences

The Group's principal subsidiaries have a US Dollar functional currency. Foreign exchange differences arise on the translation of monetary assets and liabilities denominated in foreign currencies, which for the principal subsidiaries of the Group are the Russian Rouble and GB Pounds Sterling.

The following exchange rates to the US Dollar have been applied to translate monetary assets and liabilities denominated in foreign currencies.

	31 December 2019	31 December 2018
GB Pounds Sterling (GBP : US\$)	0.75	0.78
Russian Rouble (RUB : US\$)	61.91	69.47

The Rouble recovered by 11% against the US Dollar during 2019, from RUB69.47 : US\$1 as at 31 December 2018 to RUB61.91 : US\$1 as at 31 December 2019. The average year-on-year depreciation of the Rouble against the US Dollar was approximately 3%, with the average exchange rate for 2019 being RUB64.69 : US\$1 compared to RUB62.68 : US\$1 for 2018. The Group recognised foreign exchange losses of US\$21 million in 2019 (2018: gains of US\$8.5 million) arising primarily on Rouble denominated net monetary assets.

Corporate activities

Guarantee over IRC's external borrowings and refinancing of IRC's project finance facility

The Group historically entered into an arrangement to provide a guarantee over its associate's, IRC, external borrowings, the ICBC Facility ('ICBC Guarantee'). At 31 December 2018 the principal amounts outstanding subject to the ICBC guarantee were US\$169.6 million. Under the terms of the arrangement the Group was entitled to receive an annual fee equal to 1.75% of the outstanding amount, which amounted to

US\$0.6 million during the period (2018: US\$4.0 million).

In March 2019, IRC has refinanced the ICBC Facility through entering into a US\$240 million new facility with Gazprombank ('Gazprombank Facility'). The facility was fully drawn down during the year ended 31 December 2019 and was used, inter alia, to repay the amounts outstanding under the ICBC Facility in full, the two loans provided by the Group in the equivalent of approximately US\$57 million and part of the guarantee fee of US\$6 million owed by IRC to the Group in respect of the guarantee of the ICBC Facility. At 31 December 2019 the remaining outstanding contractual guarantee fee was US\$5.0 million, which had a corresponding fair value after provision for credit losses of US\$4.4 million and is payable by IRC no later than 31 December 2020 (31 December 2018: outstanding contractual guarantee fee of US\$10.3 million with a corresponding fair value after provision for credit losses of US\$6.8 million).

A new guarantee was issued by the Group over part of the Gazprombank Facility ('Gazprombank Guarantee'), the guarantee

mechanism is implemented through a series of five guarantees that fluctuate in value through the eight-year life of the loan, with the possibility of the initial US\$160 million principal amounts guaranteed reducing to US\$40 million within two to three years, subject to certain conditions being met. For the final two years of the Gazprombank Facility, the guaranteed amounts will increase to US\$120 million to cover the final principal and interest repayments. If certain springing recourse events transpire, including default on a scheduled payment, then full outstanding loan balance is accelerated and subject to the guarantee. The outstanding loan principal was US\$225 million as at 31 December 2019. Under the Gazprombank Guarantee arrangements, the guarantee fee receivable is determined at each reporting date on an independently determined fair value basis, which for the year ended 31 December 2019 was estimated at the annual rate of 3.07% for 2019 by reference to the average outstanding principal balance under Gazprombank Facility. The guarantee fee charged for 2019 was US\$5.6 million, with corresponding value of US\$5.0 million after provision for expected credit losses

* Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages 256 to 262 for further information on our APMs.



The following assets and liabilities have been recognised in relation to the ICBC Guarantee and Gazprombank Guarantee as at 31 December 2019 and 31 December 2018:

	31 December 2019 US\$ million	31 December 2018 US\$ million
Other receivables – ICBC Guarantee	4.4	6.8
Other receivables – Gazprombank Guarantee	5.0	–
Financial guarantee contract – ICBC Guarantee	–	(37.4)
Financial guarantee contract – Gazprombank Guarantee	(8.9)	–

The following gains and losses resulting from the aforementioned transactions were recognised during the period:

	2019 US\$ million
Fair value change on ICBC Guarantee fee receivable	3.6
Gazprombank Guarantee fee for the year	5.0
De-recognition of liability under ICBC Guarantee arrangements	37.4
Recognition of liability under Gazprombank Guarantee arrangements	(8.9)
Interest on loans advanced to IRC	1.8
Reversal of provision for expected credit losses following repayment of loans advanced to IRC	3.2
	41.1

Option to acquire non-controlling 25% interest in LLC TEMI

In May 2019, the Group entered into the option contract to acquire non-controlling 25% interest in LLC TEMI, holder of licenses for the Elginskoye Ore Field and Afanasievskaya Prospective Ore Area, from its shareholder Agestia Trading Limited for an aggregate consideration of US\$60 million (adjusted to US\$53.5 million if certain conditions are met). The option premium payable is US\$13 million, which was paid during the year ended 31 December 2019. The exercise period of the option is 730 days from 22 May 2019.

The Group employed an independent third-party expert to undertake the valuations of the underlying 25% interest in LLC TEMI and the call option. As at 31 December 2019, the fair value of the derivative financial asset was US\$11.0 million reflecting a loss on re-measurement to fair value of US\$2.0 million and the initial US\$13 million cash payment.

Placement of US\$125 million new convertible bonds and concurrent repurchase of outstanding US\$100 million Convertible Bonds

In July 2019, the Group has issued US\$125 million convertible bonds due 2024. The bonds were issued by the Group's wholly owned subsidiary Petropavlovsk 2010 Limited (the "Issuer") and are guaranteed by the Company. The bonds carry a coupon of 8.25% per annum, payable quarterly in arrears. The bonds are, subject to certain conditions, convertible into fully paid ordinary

shares of the Company with an initial exchange price of US\$0.1350, subject to customary adjustment provisions.

Concurrently with the issue of the US\$125 million convertible bonds, the Group also concluded the invitation to repurchase (the "Repurchase") any and all of the outstanding US\$100 million 9.00% convertible bonds due 2020 (the "Existing Bonds"). Holders whose Existing Bonds have been accepted for purchase by the Issuer pursuant to the Repurchase were eligible to receive US\$1,080 per US\$1,000 in principal amount of the Existing Bonds (the "Repurchase Price"). The Issuer also paid, in respect of Existing Bonds accepted for purchase pursuant to the Repurchase, a cash amount representing the accrued but unpaid interest ("Accrued Interest") on each US\$1,000 in aggregate principal amount of Existing Bonds accepted for repurchase from and including 18 June 2019, being the immediately preceding interest payment date applicable to the Existing Bonds, to but excluding the settlement date for the Repurchase (the "Repurchase Settlement Date"). The remaining Existing Bonds were redeemed at the Repurchase Price on 9 July 2019. The Issuer also paid a cash amount representing the Accrued Interest on each US\$1,000 in aggregate principal amount of Existing Bonds from and including 18 June 2019 to redemption. The Existing Bonds were subsequently cancelled by the Issuer.

The US\$11.2 million difference between cash paid to purchase the Existing Bonds and the carrying value of respective debt was recognised as loss on re-purchase of the Existing Bonds.

Going concern

The Group monitors and manages its liquidity risk on an ongoing basis to ensure that it has access to sufficient funds to meet its obligations. Cash forecasts are prepared regularly based on a number of inputs including, but not limited to, forecast commodity prices and the impact of hedging arrangements, the Group's mining plan, forecast expenditure and debt repayment schedules. Sensitivities are run for different scenarios including, but not limited to, changes in commodity prices, cost inflation, different production rates from the Group's producing assets and the timing of expenditure on development projects. This is done to identify risks to liquidity and enable management to develop appropriate and timely mitigation strategies. The Group meets its capital requirements through a combination of sources including cash generated from operations, advances received from customers under prepayment arrangements and external debt.

CFO Statement continued

For the year ended 31 December 2019

The Group performed an assessment of the forecast cash flows for the period of at least 12 months from the date of approval of the 2019 Annual Report and Accounts. As at 31 December 2019, the Group had sufficient liquidity headroom. The Group is also satisfied that it has sufficient headroom under a base case scenario for the period to June 2021. The Group has also performed projections under a layered stressed case that is based on a gold price, which is approximately 10% lower than the upper quartile of the average of the market consensus forecasts, processing of third-party concentrate through POX facilities is approximately 10% lower than projected and oxide gold production from underground operations at Pioneer and Malomir approximately 10% lower than projected, and Russian Rouble : US Dollar exchange rate that is approximately 10% stronger than the average of the market consensus forecasts. This layered stressed case indicates sufficient liquidity for a period of at least 12 months including under downside IRC performance scenarios.

As at 31 December 2019, the Group has guaranteed the outstanding amounts IRC owed to Gazprombank. The outstanding loan principal was US\$225 million as at 31 December 2019 and the facility is subject to an initial US\$160 million guarantee by the Group (see note 26). The assessment of whether there is any material uncertainty that IRC will be able to repay this facility as it falls due is another key element of the Group's overall going concern assessment. IRC projections demonstrate that IRC expects to have sufficient liquidity over the next 12 months and expects to meet its obligations under the Gazprombank Facility. If a missed repayment under debt or guarantee obligations occurs which, if not remedied by the Group, would result in events of default which, through cross-defaults and cross-accelerations, could cause all other Group's debt arrangements to become repayable on demand.

The directors have also considered the potential impacts of COVID-19 which are described in detail on pages [6](#), [30](#) and [31](#) of the Annual Report.

Having taken into account the aforementioned factors, and after making enquiries and considering the uncertainties described above, the Directors have a reasonable expectation that the Group will have adequate resources to continue in operational existence for the foreseeable future, being at least the next 12 months from the date of approval of the 2019 Annual Report and Accounts. Accordingly, they continue to adopt the going concern basis of accounting in preparing these consolidated financial statements.

2020 Outlook

Production is on track to meet the full year target of 620 – 720koz of gold in 2020. The Group expects TCC* in 2020 to be in the range of US\$700 – US\$800/oz excluding third-party concentrate as the pricing of concentrate depends on highly volatile gold price.



Danila Kotlyarov
Chief Financial Officer

* Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages [256](#) to [262](#) for further information on our APMs.

Sustainable Development





Sustainability Performance

Our key performance indicators appear throughout this report and introduce the operational, financial and sustainable development sections; respectively pages [42](#), [70](#) and [86](#).

Lost Time Injury Frequency Rate (LTIFR)

2019	1.61
2018	2.52
2017	3.11

Definition

Lost Time Injury Frequency Rate (LTIFR) is a measure of the rate of recorded accidents, including fatalities, which occur at the Group's premises within the reporting period, per million man-hours worked. Contractors are excluded.

Relevance

As a mining company, safety is our first priority and we are committed to achieving a zero-harm workplace and ensuring that our employees return home safely. We strive to maintain a safe environment across our operations and are continuously looking at ways to improve safety performance, which includes implementing additional safety protocols, providing protective equipment and effectively managing risks. LTIFR is one of the key performance indicators used to measure the effectiveness of the occupational health and safety policies and practices, and to identify trends and areas of focus. It is an integral part of a complex system covering the database of statistics, educational programmes and operating parameters which are subject to an ongoing analysis and control. LTIFR ensures the Group's compliance with Russian legislation and provides the Group with a basis for continuous improvement.

Verification / assurance

Reported LTIFR data has been verified by an independent audit undertaken by Wardell Armstrong International (WAI) (please refer to [page 124](#)).

Performance in 2019

For the year ended 31 December 2019, Group operations recorded an LTIFR of 1.61 accidents per million man-hours worked, representing a 36% improvement from 2.52 accidents per million man-hours worked in 2018. The improvements are mainly attributable to stricter and more rigorous safety control across the Group.

During 2019, we continued to address any gaps in knowledge of safety procedures. Training was conducted for relevant departments to reinforce the drive to

create a safer workplace and to highlight everyone's personal responsibility in achieving this goal.

The Company recognises both the personal responsibility of each employee at every site and workplace, and the Group's accountability for the safety measures and actions to create the safety environment, striving for the ultimate zero-injury record.

Going forward

In 2020 we will continue to analyse our health and safety performance by ensuring a constant dialogue with our people, who help us to identify areas for improvement. Health and safety is an integral aspect of our culture and we are continuously looking at ways of improving our performance. One of these methods is to continue developing and providing safety programmes and training to our employees. We will continue our efforts in maintaining an LTIFR lower than or equal to 1.61.

Our focus will be on health and safety training across the Company through the use of recognised tools, as well as through the introduction of additional programmes, in which the Pokrovskiy Mining College (the Group's in-house educational facility) plays an important part as a place of study for future and current employees.

We look to continue maintaining a high level of health and safety awareness using campaigns, emergency drills and measures aimed at preventing the occurrence of occupational diseases. Safety performance will continue to be monitored at all levels of the business, with ultimate oversight by the Board of Directors.

For more information on Health & Safety please go to [page 109](#).

Total Headcount and Gender Split

2019	6,819	2,261	9,080	= 24.9% female staff	■ Male
2018	6,713	2,187	8,900	= 24.6% female staff	■ Female
2017	6,674	1,950	8,624	= 22.6% female staff	

Definition

Total headcount is the total number of personnel employed by the Group, while Gender split is the number of male and female staff as a proportion of the overall workforce. Both data points are reported as at 31 December of each calendar year.

Relevance

This KPI allows the Group to ensure that there is an appropriate number of employees to fulfil the strategy and to maintain a balanced split of males and females throughout the business. Management firmly believes that the Group's ongoing success depends in part on its ability to hire, motivate, develop and retain staff with the right skills and experience, to help them master challenges and make the most of opportunities. Although traditionally the mining industry in Russia has been heavily male dominated, the Group actively seeks to apply meritocratic principles and provides equal opportunities and pay for all employees, regardless of gender. Female employees occupy senior positions across the business which include departmental heads, deputy directors, chief accountants and managers of laboratories. We consider the ratio of female workers to be of material importance to the Group and look to ensure that they have equality of opportunity within the business. All employees, regardless of age, gender, race, sexuality, disability or culture have equal opportunities for professional development and training.

Performance in 2019

Total headcount remained stable throughout 2019. 97.5% of our personnel were employed on a full-time basis and 96.5% of our employees had permanent contracts. As part of the Company's strategy to avoid redundancies as a result of the cessation of the Pokrovskiy mine, a decision was taken to build the POX Hub using the mine's existing infrastructure and this was instrumental in saving the majority of jobs. Employees in redundant positions at the new POX Hub were offered an opportunity to be transferred to other Petropavlovsk operations and most accepted. As a result, we were able to avoid dismissals and actually finished 2019 with a slight increase of 4.6% in total headcount.

As at 31 December 2019, 2,261 employees were female, representing almost a quarter of the Group's total workforce. The ratio of female employees increased slightly when compared to 2018 and remained well above our target of 20%.

We have a relatively high ratio of female employees in managerial positions of 34% and 35% in the exploration department. The lowest ratio of female employees is in construction and blast holes drilling departments (amounting to 5.5% and 7.6% respectively). This is due to legislative restrictions set out in Labour legislation of the Russian Federation which include a list of jobs and occupations with harmful and/or hazardous working conditions, where the use of women's labour is prohibited, such as welding, drilling, metal fitting etc.

Going forward

Staff diversity reviews at Petropavlovsk are conducted on an ongoing basis. The Group is committed to operating as a responsible employer, promoting equal opportunities, fair treatment and non-discrimination of workers, as required under both Russian and UK law. As the business continues to grow, evolve and develop, as part of the resourcing and HR strategy, the Group will seek to ensure that it continues to hire a diverse range of well-qualified personnel.

In 2020, we will continue to focus on keeping our gender diversity ratio above 20%. As a part of this aim, we will assess the equality of opportunity offered by recruitment programmes and practices through the Group.

In 2020, Petropavlovsk is launching a gender diversity programme, developed in partnership with Women in Mining. The programme is aimed at promoting opportunities within the mining industry among female graduates and increasing the focus on gender diversity.

For more information on Diversity please go to [page 100](#).

Sustainability Performance continued

Greenhouse Gas (GHG) Emissions

Year	Scope 1: Direct GHG emissions (t CO ₂ e)	Scope 2: Indirect GHG emissions (t CO ₂ e)	Total GHG emissions (t CO ₂ e)
2019	206,379	248,502	454,881
2018	209,164	218,854	428,018
2017	218,502	227,305	445,807

Year	GHG emissions intensity (t CO ₂ e / oz)
2019	0.88
2018	1.01
2017	1.01

Methodology

The Company has adopted a methodology for reporting its Greenhouse Gases (GHG) emissions measured in CO₂ equivalent (CO₂e). In our approach we are guided by the reporting principles as set out by the GHG Protocol Corporate Accounting and Reporting Standard (GHG Protocol Corporate Standard).

In accordance with the laws of the Russian Federation GHG emissions associated with our consumption of diesel, kerosene, benzene and coal (Scope 1) are calculated using approved formulae. GHG emissions associated with our consumption of electricity (Scope 2) are calculated using the International Energy Agency (IEA) electricity conversion factor for the Russian Federation and are measured in tonnes of carbon dioxide. All emissions values disclosed above are presented gross, with no deductions for export of renewable energy or purchases of certified emission reduction.

The Company reports all emissions sources as required under the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations 2013. These sources fall within our consolidated financial statements. We do not have responsibility for any emission sources not included as part of the Company's consolidated statements.

As a gold producer, we consider ounces of gold as the appropriate measurement unit for intensity calculations. In 2019, Petropavlovsk produced 517.3koz and this figure has been used to calculate GHG emissions intensity.

Relevance

The Group recognises its responsibility to manage and reduce GHG emissions in order to diminish its overall carbon footprint. Monitoring progress with this goal is essential in terms of our focus on climate-related risks and opportunities. A reduction in GHG emissions may result in a decrease in operating expenditure as a result of efficiencies achieved.

Verification / assurance

Reported GHG emissions data has been verified by an independent audit undertaken by WAI (please refer to [page 124](#)). The Group also submits annual emissions reports to the Russian Environmental Agency, Rosprirodnadzor. Internal verification is conducted at a corporate level.

Performance in 2019

In 2019, Scope 1 direct GHG emissions originated from the following sources:

- Diesel: excavators, trucks, bulldozers, crushers, screens, pumps and cars;
- Kerosene: helicopters;
- Petrol: cars; and
- Coal: heating plants. All heat generated is re-used by the Group.

Scope 2 indirect GHG emissions originate from electricity purchased for the Group's needs. Supply of electricity is carried out under several power supply agreements with a major supplier to the Amur region (PJSC Far-Eastern Energy Company (FEEC)).

Electricity generated in the Amur region is produced predominantly by two hydropower plants (HPP), the Zeyskaya and Bureyskaya HPPs which are among the largest renewable power plants in Russia. Approximately 90% of

electricity purchased by the Group comes from renewable sources.¹

In 2019 the Group achieved a 13% reduction in the intensity of GHG emissions as a result of the focus on energy efficiency and an increase in gold production when compared to 2018, despite a 4% increase in total GHG emissions.

Going forward

The Group will continue to monitor its GHG emissions and analyse all relevant data on a quarterly basis to better understand where improvements can be made. Given the production forecast for 2020, our strategic target is to further decrease GHG emissions intensity by at least 1% next year. Quarterly updates on GHG emissions will be reported by the Group's accordingly.

In 2020, as a part of our comprehensive Sustainability strategy, we are planning to align our reporting standards with the GHG Protocol Corporate Standard, which will include:

- Conducting GHG inventory to ensure all sources of emissions are included;
- Establishing a base year to track our progress towards a GHG emissions target; and
- Identifying the sources of Scope 3 emissions.

For more information on emissions please go to [page 116](#).

1. 90% is a reasonable assumption made by Petropavlovsk based on the high density of hydro-electric facilities in the region. FEEC was unable to confirm the exact portion of electricity generated from renewable sources due to data unavailability.



Introduction from the Chairman of the Safety, Sustainability & Workforce Committee

Dear Shareholder

After my first full year as Chairman of the Safety, Sustainability & Workforce Committee, I am delighted to share with you Petropavlovsk's 2019 Sustainability Report which outlines our achievements over the past twelve months and sets out our goals and ambitions in this critical aspect of our business for the years ahead.

Our people are the foundation of our business and there is nothing more important to us than their safety, their health and their wellbeing. At this time of significant concern over the tragic consequences of the COVID-19 pandemic, the Committee is working closely with management to ensure that the Company does everything it can to protect its employees and their families and to support the local and national governments with whom we work in their efforts to contain the outbreak. More details on Petropavlovsk's response to the COVID-19 pandemic are available on page 6.

A fundamental pillar of the operational and financial success of our business is that we continue to improve the health and safety environment within which our people work. We passionately believe that it is the right of everyone working within our business to return to their families and friends unharmed at the end of every working day and shift cycle. It is our firm commitment to cause zero harm. Through the use of effective systems, processes, leadership and employee engagement we strive to eliminate all fatal and serious accidents and to continue to drive down the number of incidents as measured by our LTIFR.

I am pleased to report that over the past year the Group's LTIFR has fallen from 2.52 in 2018 to 1.61, a reduction of 36% and this improvement reflects our determination to deliver on our goal of zero harm. In addition, I am proud to report that there were no material health or environmental incidents at any of our operations during the year. The Committee has worked with management to identify ways of continuing to improve the design, reporting and implementation of health, safety and environmental strategies and it is our aim to be able to report further improvements during the coming year. More details on management's plans to improve our health and safety record further during 2020 is provided on pages 109 to 111. Training and development are vital catalysts for improvement and much of this work is

done through our Pokrovskiy Mining College details of which can be found on [page 110](#).

As set out on [page 88](#), I am also pleased to confirm a reduction in the intensity of the Group's greenhouse gas emissions over the past year. This improvement came as a result of the more efficient use of resources in the company's operations and a Group-wide energy saving programme. The latter is based on the implementation of modern technology as well as compact space planning solutions for buildings and their positioning. The Group has continued to gradually switch away from the use of coal and diesel wherever it can and now draws 46% of its total energy requirement from the Amur region's electrical grid. Every opportunity to further lower the reliance on fossil fuels is being taken in order to minimise the Group's carbon footprint and resulting impact on the environment.

In April 2019, as a part of our workforce engagement programme, my colleagues and I travelled to the Group's operational sites in the Far East of Russia to meet with both workforce and Trade Union representatives, including the Chairman of the independent Trade Union organisation of Pokrovskiy mine. The purpose of the visit was to increase bilateral dialogue with the workforce and to see for ourselves the work that is being done to improve the health and safety of employees. In addition, we assessed the controls in place to manage our hydraulic storage facilities and we reviewed the proactive community support that is being provided into the remote areas surrounding our operations. The Committee met with the Head of Health & Safety at Malomir and also with the Head of our Environmental Department, who presented to the Committee on the Group's approach to environmental management.

In 2019 Petropavlovsk celebrated 25 years of operation and we are very proud of the efforts we have made to support our local communities. Throughout this time we have built strong relationships with our employees, the large majority of whom reside in the Amur region. As one of the largest, non-governmental employers in the area Petropavlovsk plays a significant role in contributing to local economic activity, infrastructure development, social cohesion and emergency support in times of hardship.

An important aspect of ensuring strong community engagement is to be fully transparent on any issues that may affect

local stakeholders. While our first objective is always to discuss any issues directly with those affected, in 2019 we developed a new grievance procedure to enable members of the public and other stakeholders to confidentially raise any issues concerning our activities that they may have. Through this process they are assured that the issues will be carefully assessed and that a comprehensive written response will be provided.

In December 2019 Petropavlovsk was very pleased to join the United Nations (UN) Global Compact initiative. The Company is proud to join thousands of other companies who are all committed to responsible business decision-making in pursuit of a better and more sustainable world. We look forward to learning from other participants and to setting an example and promoting best practice within Russia and the wider global mining industry.

Sustainability has always been integral to Petropavlovsk's operations. The ever-growing and dynamic nature of environmental, social and governance (ESG) factors however means that we need to closely monitor how best we can apply emerging developments in these fields to our business. To do this we are in the process of establishing of a new comprehensive ESG programme which will contain a set of ambitious short and long-term targets. These targets will be designed to enhance Petropavlovsk's sustainability policies and practices and to ensure the business is set on a course of long-term improvement. I look forward to sharing these with you next year, as well as commenting on the progress we have made towards their attainment.

I hope that you will find this Sustainability Report interesting and informative. Finally, I would like to thank management, our employees and my fellow committee members for all their hard work and dedication over the past year in further improving the health, safety, environmental management and sustainability of the company.



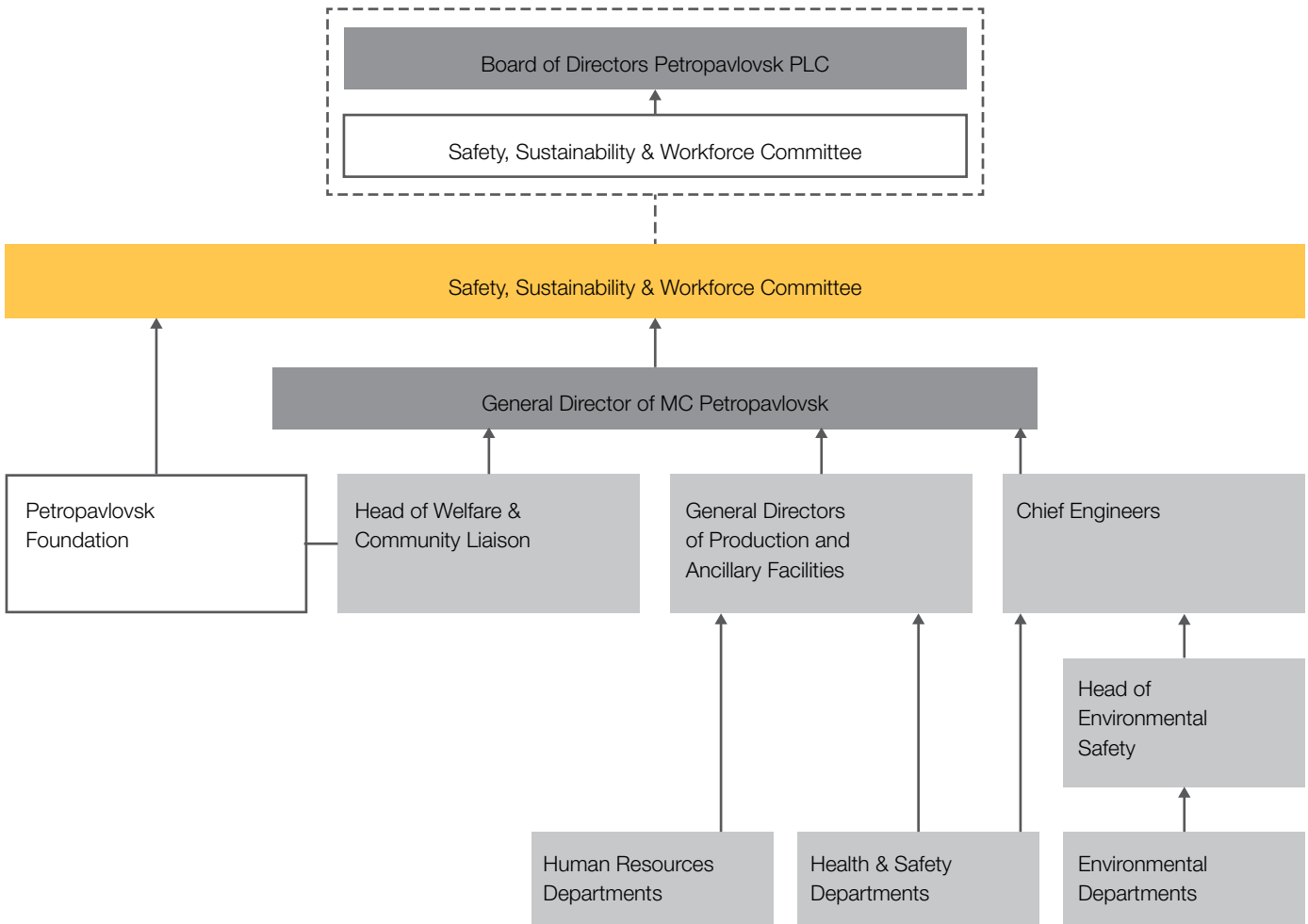
Harry Kenyon-Slaney
Chairman, Safety, Sustainability & Workforce Committee

Our Approach

Overview

For the past 25 years, responsible business and sustainable development have been integral to our operations. The Company's approach to sustainability has evolved over time and will continue to adapt and grow as we look forward. At the heart of our ethos has always been a recognition that our ethical, social and environmental practices should always be fully incorporated into our business model and aligned with our strategy.

Sustainability framework



We produced our first sustainability report in 2006 – long before the significantly increased level of societal focus on this fundamental area we see today. In this early report, we asserted our belief that maintaining high levels of economic, environmental and social performance contributes to increased shareholder value and maintains and enhances our “social licence to operate” within our host communities. This principle persists to this day and forms the backbone of our thinking. Beyond the obvious advantage of being the right way to do business, operating in a responsible manner has significant benefits, which include improved productivity, a lower risk profile and the creation of additional value for our stakeholders.

Our sustainability approach is underpinned by our corporate values and guiding principles (shown below). Our objective is to act in the interests of our stakeholders, including shareholders, employees and the communities in which we operate, by ensuring our activities are efficient, transparent and sustainable.

We place people first. Responsible practices are our highest priority and we aim to operate safely, efficiently and transparently, continually seeking new ways to ensure an injury-free workplace. We are committed to respecting our environment which means preventing pollution, minimising waste, increasing carbon efficiency and optimising natural resource usage. We develop innovative solutions to manage and mitigate environmental risks and welcome an active dialogue with local communities. Cognisant of the socio-economic impact we are able to make within the Amur region, we prioritise local recruitment and procurement.

We are particularly proud of the new technology we have implemented at the POX Hub, which is regarded as the most efficient, robust and environmentally responsible way of processing a diverse range of refractory concentrates.

Sustainability is managed via a robust framework (as demonstrated on [page 90](#)) to ensure the responsible management of health, safety, environmental and social issues and we have reporting systems in place to enable adequate reporting and communication of performance, issues and progress. The Board is ultimately responsible for this area of the business.

We report on sustainability performance on an annual basis and encourage any feedback or questions to be addressed to sustainability@petropavlovsk.net.

Full description of how our environmental and social risks are managed is covered in Principle Risks section on [page 26](#).

Our sustainability values

- We aim to operate such that we avoid causing harm to employees, the environment and local communities;
- Work-related incidents, illnesses and injuries are preventable;
- Foreseeable hazards and environmental impacts must be identified, the associated risk assessed and, where reasonably practical, eliminated or minimised;
- We respect the human rights of our workers, suppliers and host communities;
- There is a safe and correct way of doing every task, however urgent or important;
- All employees are responsible for their own actions and the workplace health and safety of their fellow workers; and
- Health, safety and environmental performance and community engagement can be continually improved.

Our guiding principles

We will:

- Implement and maintain ethical business practices and sound systems of corporate governance;
- Integrate sustainable development considerations within the corporate decision-making process;
- Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities;
- Implement risk management strategies based on valid data and sound science;
- Seek continual improvement of the Company’s health and safety performance;
- Seek continual improvement of the Company’s environmental performance;
- Contribute to conservation of biodiversity and integrated approaches to land use planning;
- Facilitate and encourage responsible product design, use, re-use and recycling;

- Contribute to the social, economic and institutional development of the communities in which the Company operates; and
- Implement effective and transparent engagement, communication and independently verified reporting arrangements with Group stakeholders.

Our commitments

- Managing our operations to ensure the health, safety and security of employees, contractors and local communities, and to limit any negative impact on the surrounding environment. In planning our approach to business, we recognise that we have duties to shareholders and responsibilities to a wider group of stakeholders (those who can affect or who are affected by our activities);
- Undertaking all our operations in compliance with Russian regulatory requirements and international good practice, wherever possible; and
- Going beyond legal compliance where necessary to protect our workers, the surrounding environment and the communities within which we operate.

The UN Global Compact

Since 2019 Petropavlovsk PLC has been committed to the [UN Global Compact](#) corporate responsibility initiative and its principles in the areas of human rights, labour, the environment and anti-corruption. Read more on [page 97](#).

WE SUPPORT



Our Approach continued

Stakeholder engagement

The Group is committed to establishing and maintaining constructive relationships with all stakeholders to foster sustainable, positive and transparent interaction, and to ensure there are benefits to all stakeholders from the Group's activities during the lifetime of each operation and beyond. All persons or groups that are directly or indirectly involved in the operations of the Group are considered stakeholders. New stakeholders are regularly identified and included in the consultation process.

Stakeholder engagement in 2019

Stakeholder group	Why they are important
Shareholders, lenders, bondholders	<p>Our equity and fixed income investors are de-facto owners of the Company and hence concerned with sustainability and long-term value creation. By having robust engagement processes, we build trust in the future of the Company and ensure that investors have a full spectrum of information available to them when making investment decisions.</p> <p>Amongst other things, this group of stakeholders are also providers of funding and therefore effective engagement is paramount to ensure that our cost of capital truly reflects the investment proposition the Company offers.</p>
Employees	<p>We regard people as our most valuable asset and believe that investing in our employees delivers long-term rewards in the form of a skilled and loyal workforce. Our employees' experience and expertise is a major driver of the Group's successful operations.</p> <p>The health and safety of our people remains our number one priority and we are continually seeking new ways of achieving an injury-free workplace.</p>
Suppliers and contractors	<p>Suppliers and contractors are essential to the successful running of our business. Responsible supply chain management is an important part of achieving our goal of continuous sustainable development.</p> <p>We strive to work with suppliers and contractors who share our approach to legal compliance, industrial safety, human rights and environmental protection.</p>
Local communities, including Indigenous communities	<p>Building long-term relationships with local communities and enhancing their lives is important to us. We aim to engage in an open and transparent manner with all local communities and NGOs.</p>
Government and industry authorities	<p>Good relations with the national and local governments are required to maintain our licence to operate. Petropavlovsk complies with all laws and regulations relevant to our business.</p> <p>We recognise the socio-economic influence we have as one of the major employers and taxpayers in the Amur region.</p>

Engagement mechanism	Who is responsible within the Group	Key topics	Results 2019
<ul style="list-style-type: none"> – AGM – Annual Report – Investor conferences, conference calls, one-to-one meetings – Site visits 	<ul style="list-style-type: none"> – Board – CEO – Deputy CEO – Investor Relations department 	<ul style="list-style-type: none"> – Economic performance – Anti-corruption 	<ul style="list-style-type: none"> – Share price gain of 102% in 2019 – Group-wide Anti-Bribery Policy in place – Five sustainability statistics now reported quarterly – Capital Markets Day held in September 2019 – Convertible bond issue in June 2019 significantly oversubscribed <p><i>More on page 5 and on our website www.petrodavlovsk.net/investors/</i></p>
<ul style="list-style-type: none"> – Website – Intranet – Corporate newspaper Pokrovka Plus, Social media accounts – Trade Union – Meetings and face-to-face communication with management 	<ul style="list-style-type: none"> – Welfare and Community Liaison team – HR Departments – Health & Safety Departments – General Directors of production and Ancillary facilities 	<ul style="list-style-type: none"> – Health & Safety – Training and education – Employment and salaries 	<ul style="list-style-type: none"> – 0 fatalities – 36% improvement in LTIFR <p><i>More on Health & Safety page 109</i></p> <ul style="list-style-type: none"> – 62 hours on average of training and education per employee <p><i>More on training on page 102</i></p> <ul style="list-style-type: none"> – Average wages 32% above the national average <p><i>More on remuneration and benefits on page 101</i></p>
<ul style="list-style-type: none"> – Direct correspondence – Meetings – Contractual relationships 	<ul style="list-style-type: none"> – Operations directors and Chief engineers – Procurement departments 	<ul style="list-style-type: none"> – Local procurement – Open channels of communication 	<ul style="list-style-type: none"> – 41% of procurement derived from local suppliers – US\$313.3 million paid to suppliers <p><i>More on page 96</i></p>
<ul style="list-style-type: none"> – Public hearings – Corporate newspaper Pokrovka Plus, Social media accounts – Social and charity activities – Company website – Site visits – Grievance procedure 	<ul style="list-style-type: none"> – Welfare and Community Liaison team – Petropavlovsk Foundation team 	<ul style="list-style-type: none"> – Tax – Investment in community development – Rights of Indigenous communities 	<ul style="list-style-type: none"> – 65.3% of workforce employed locally – US\$1.6 million of social investment – Agreement signed by Albyn mine and the Association of Indigenous Minorities of the North of the Selemdzhinsky District in 2019 <p><i>More on page 105</i></p>
<ul style="list-style-type: none"> – Meetings, round-table conferences – Industry conferences – Direct correspondence – Company website – Circulation of information (brochures, factsheets, leaflets, etc.) 	<ul style="list-style-type: none"> – CEO – Managing directors at operations – Welfare and Community Liaison team – Legal team – GR team 	<ul style="list-style-type: none"> – Tax – Legal compliance – Contributing to infrastructure and quality of life 	<ul style="list-style-type: none"> – 0 environmental fines, – 0 moderate or serious environmental accidents <p><i>More on page 114</i></p> <ul style="list-style-type: none"> – 174 km high-voltage power line built in cooperation with the government <p><i>More on page 108</i></p>

Our Approach continued

Materiality assessment

We conducted a materiality assessment to define the sustainability topics that are most important to our business and most relevant to our internal and external stakeholders, thereby enabling us to report on these themes in accordance with GRI Standards (Core Option).

The initial step in the process was to identify and rank over 50 topics, including broad sustainability trends affecting the Company as well as specific topics that could significantly impact long-term business viability. In defining these topics, we looked at industry trends and risks, internal information and data, peer disclosure and media analysis. We then identified three key groups of stakeholders, which included employees, shareholders and local communities in the areas where we operate and consulted them on our material topics. This process not only provided the Company with a valuable engagement tool, but also allowed us to better understand the ESG topics considered by our stakeholders to be of the highest importance.

Stakeholder feedback was collected via an online survey and ranked in terms of the importance of each topic on a three-point scale based on our assessment of aggregate feedback.

The results showed that, for our employees, training and education opportunities were crucial, alongside salaries, operational performance and occupational health and safety. For our local communities, the payment of taxes was considered of paramount significance. Our shareholders prioritised economic performance. All three stakeholder groups considered the environmental impact of our operations to be important.

When assessing whether a topic is material, two main criteria were used: the importance to stakeholders and the significance of its impact on our business. As a result, we identified and ranked 16 material topics which are presented in this report.

Certain topics are overarching themes which consider a number of sub-themes and have been grouped to ensure a concise overview of materiality. An example of this would be 'ethical business practices', which includes diversity, non-discrimination, human rights, anti-corruption, which is important to our shareholders, and other ethical considerations. Similarly, occupational health and safety importantly also includes emergency preparedness, while employment

covers numerous responsible practices surrounding remuneration, benefits and elements of labour relations.

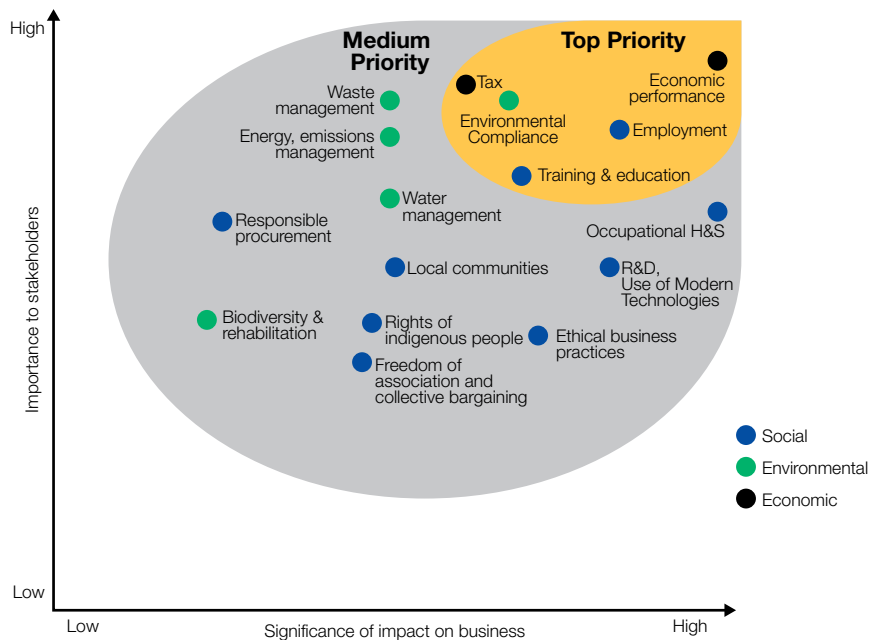
Addressing the key findings of this feedback will be one of our priorities in 2020 and forms part of our ESG framework.

On the basis the GRI tax standard was launched in 2019, we have taken the decision to report on this from 2020 onwards.

Materiality assessment flow chart



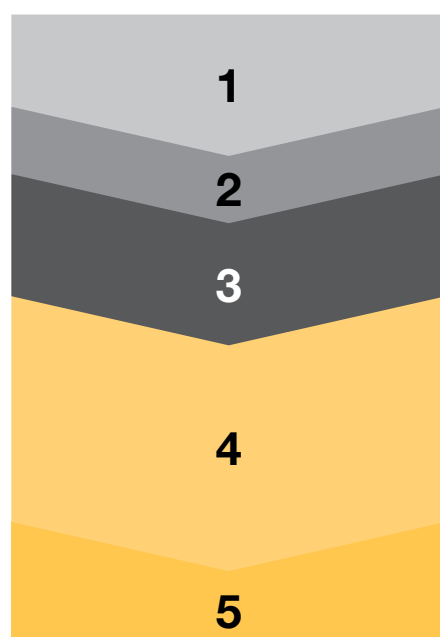
Assessment of priorities assigned by stakeholders





Approach to reporting

Our approach to reporting follows five key steps:



1. Sustainability report working group is established, with ownership and accountability defined.
2. Materiality assessment is conducted using a stakeholder engagement process.
3. HSE and social performance data is collected and analysed, with feedback received for the previous report from Board, advisers and other stakeholders.
4. The report is drafted, with a focus on materiality, transparency and completeness, with the aim of providing a meaningful and comprehensive update on the Group's sustainability activities. The draft report then undergoes a comprehensive internal verification process.
5. The report and data are submitted to the CEO and Deputy CEO for review and sign off. External verification has been provided by Wardell Armstrong International (more information on [page 124](#)).

Reporting boundaries

The reporting boundaries used for the sustainability section of this report include all Petropavlovsk's operating assets and entities within the Group, unless stated otherwise. Total employee numbers are reported at Group level. From an environmental indicator perspective, data primarily covers the direct impacts from Petropavlovsk's operating assets (Pioneer, Albyn, Malomir, the POX Hub and support functions) with other administrative offices excluded due to immateriality. Thus, GHG emissions are recorded for operating assets only. We will look to include emissions from our headquarters in Moscow in future. Non-managed joint ventures and contractors are excluded.

Supply chain management and responsible procurement

Responsible supply chain management is an important part of achieving our goal of continuous sustainable development. Our operations are supported by a supply chain which predominantly comprises goods and services required for the mining, processing and recovery of gold. Two thirds of all Group purchases are procured for mining operations, including fuel, explosives, processing chemicals, milling materials and mechanical spares and tyres. The Company continues to strengthen relationships with local suppliers to enhance its socio-economic contribution to the Amur region in which its operations are based.

We strive to work with suppliers who share our approach to legal compliance, industrial safety, human rights, fair employment practices and environmental protection. All our suppliers are required to comply with our safety and environmental policies. In order to prevent modern slavery and human trafficking in our supply chain, we require our suppliers to confirm that they have adequate policies in place to protect against these issues. All new suppliers are contractually obliged to acknowledge and unconditionally renounce any type of slavery, human trafficking, servile, forced or compulsory labour, or any exploitation as legally defined. This process is being progressively applied to all suppliers as Group contracts continue to be renewed.

Supplier assessment is carried out according to an internal system based on financial, legal, social and environmental principles developed and approved internally. Various structural divisions throughout the Group are involved in the procurement and supplier selection procedures, thereby ensuring a multi-dimensional approach and a thorough screening process. Once the supplier meets our requirements, we strive to conclude long-term and mutually beneficial contracts, whilst continuing to monitor all existing suppliers on a regular basis. An audit of suppliers by the Company's internal audit team is a part of our ongoing risk management process, with reports being provided to the Audit Committee.

We strive to make the supply chain management process as transparent as possible. The Group maintains open channels of communication with its suppliers and encourages them to raise any issues or concerns that arise in the conduct of their business.

Suppliers of hazardous substances and gold concentrate are subject to special controls to ensure that their activities comply with all legal standards and responsible business practices.

Petropavlovsk recognises its ability to have a positive socio-economic impact in the Amur region, particularly with regards to local procurement. We therefore give preference to regional suppliers and continuously strive to strengthen relationships with them. In 2019, we conducted business with over 2,000 suppliers of various sizes operating in 79 regions of Russia. 41% of procurement was derived from local suppliers, with other 43% being delivered primarily from other regions of Russia. International suppliers are included in 'Others' category as their contribution is not significant.

Geographic location of suppliers

Region	%
Moscow	16
Amur region	13
Khabarovsk region	28
Others	43

Customers and markets served

Our gold and silver bars are mainly sold to Russian banks and 100% of our total sales in 2019 were in bullion form. All processes comply with applicable national and international regulations. We ensure full compliance with Russian regulations in product quality, shipment and transportation. We have never received any significant fines for non-compliance with laws and international regulations relating to the use and provision of products and services.

Sustainable Development Goals

As part of our commitment to align our business with global initiatives in the area of sustainable development, Petropavlovsk joined the United Nations (UN) Global Compact on 18 December 2019.

The UN Global Compact is a call to companies to align their operations and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption (The Ten Principles), and to take action in support of UN goals and issues embodied in the Sustainable Development Goals (SDGs).

The Ten Principles of the UN Global Compact provide a common ethical and practical framework for our corporate social responsibility, whilst the 17 SDGs represent aspirational, long-term targets for business and other stakeholders to work in collaboration towards creating the better world for all. Together, the Ten Principles and the Global Goals will guide our values and vision to help us make the biggest contribution possible to people and planet.

In 2019, following the process of principled prioritisation of the SDGs in alignment with the Ten Principles, we identified the goals where we consider the Company has the best opportunity of maximising its positive contribution, while minimising its negative impact. The findings were presented to the senior management and the members of the SS&W Committee who discussed the importance of instigating relevant targets and disclosing the Company's efforts in driving positive changes among our stakeholders.

While Petropavlovsk recognises the importance of all 17 SDGs and aspires to making a contribution to all goals in future, in 2019 our focus was devoted to the five goals outlined below.

In 2020, while continuing our efforts in contributing to the SDGs, we will collect and analyse the data that will allow us to select a set of performance indicators which clearly link to the identified targets in order to measure our progress.

¹ "Local" in this context is considered to be those from the Amur and Khabarovsk regions.



SDG



Ensure healthy lives and promote wellbeing for all at all ages



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Ensure availability and sustainable management of water and sanitation for all



Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

Petropavlovsk contribution

We maintain healthy workplaces at all times and promote wellbeing among all our stakeholders:

- Stringent approach to safety management, with zero harm commitment;
- Providing access to quality healthcare for all our employees;
- Additional support through financing the treatment at specialised health centres;
- Availability of sport facilities at each mine; and
- Organising and sponsoring various sports events for employees and local communities.

Read more on [page 109](#).

We aim to make a meaningful contribution to education and learning in the Amur region by providing professional training opportunities and assisting local educational facilities:

- Advancing science, technology, engineering and mathematics (STEM) education through our Pokrovskiy Mining College – a unique educational institution funded by the Group;
- Ensuring equal access to education and training for our male and female employees;
- Providing facilities and resources for higher education and vocational education institutions; and
- Supporting high schools by delivering career guidance and providing learning opportunities.

Read more on pages [102](#) and [105](#).

We continue to investigate and bring into operation new, underground drinking water sources which can be used both by our operations and the local community, and strive to minimise our impact on water resources:

- Closed circuit water supply leading to zero water discharges;
- Three-stage treatment of wastewater, involving BioDisc- and UV-equipment - with reuse for operational purposes; and
- Exploration of underground drinking water deposits to supply our mines and local communities with drinking water. 10 drinking water deposits have been discovered since the inception of the Group.

Read more on pages [107](#) and [114](#).

We are developing infrastructure for the stable operation of our mines and the sustainable development of local settlements:

- Increasing transport accessibility in remote areas;
- Bridge repair and construction;
- Construction of bypass roads between our mines in order to minimise the impact on local settlements;
- Investment in new gold mining and processing technologies and R&D; and
- The establishment of innovative research centres, institutes and training organisations within the Group.

Read more on pages [56](#) and [108](#).

We are committed to protecting forests and restoring biodiversity:

- Environmental Impact Assessments conducted for every operation as part of permitting process;
- All operations are certified as ISO 14001 compliant;
- Forest protection, including forest fire protection campaigns;
- Re-forestation programmes;
- Complex land reclamation programme; and
- Fish release programmes.

Read more on [page 118](#).

Our Approach continued

Our sustainability progress in 2019 and future plans

Objective	2019 goals	Status	Performance	2020 goals and plans
Health & Safety				
Safety performance improvement	Reduce LTIFR at each mine	●	Significant decrease in LTIFR across all mining operations: Group LTIFR improved by 36% to 1.61.	Improve or sustain the Group LTIFR of 1.61.
Health & Safety framework development	Review and update H&S Policies to ensure safe working at POX Hub	●	POX Hub H&S policies were updated to reflect the introduction of new technologies to the Group's portfolio.	Further review and strengthen the Group's policies and standards across all operations.
Safety culture development	Conduct safety campaign to raise awareness	●	Road Safety Campaign and Slips/Trips/Falls Campaign were conducted to raise awareness and improve the safety culture.	Continue with Group-wide training programme, including the specific courses for the POX Hub developed at the Pokrovskiy Mining College.
Corporate Social Responsibility				
Stakeholder relationship building	Increase bilateral communications with the workforce	●	Board members visited all the mines as a part of our workforce engagement programme. An Instagram account was created to communicate Group news to employees via popular network service.	Develop direct engagement channels between management and personnel as a part of employee satisfaction monitoring.
	Increase bilateral communications with the community	●	Three community consultations organised in 2019 and early 2020 to introduce and explain our projects to local residents. Six site visits were arranged for local residents.	Enhance opportunities for open dialogue by holding community consultations.
	Further strengthen the relationship with indigenous communities	●	An agreement for harmonious development of the Ivanovskoye Evenk community signed between Albyn mine and the Association of Indigenous Minorities of the North of the Selemdzhinskiy District.	Conduct further social impact assessments at our operations. Review and update our local communities strategy.
CSR Framework Development	Adopt Speak-up and Anti-Bribery Policies aligned with international industry standards	●	Policies were developed during 2019 and adopted in early 2020 as part of our commitment to maintaining a culture of openness across all the Group and ensuring the highest standards of probity and accountability.	Conduct an information campaign, throughout the Group to ensure all employees are aware of their rights and responsibilities, and to encourage them to report any concerns regarding malpractice.
	Align grievance procedure with international industry standards	●	Completed implementation of the grievance procedure, aligning the mechanism with ICMM Principles.	Review current Code of Business Conduct and Ethics and implement any required updates.
Environmental management				
Energy efficiency	Harness innovation for further improvements	●	Implemented Waste Heat Recovery (WHR) system at the POX Hub.	Further upgrade WHR system in order to supply heat to the shift camp.
Water management	Maintain zero water discharge	●	Zero discharge to surface and underground water bodies, verified by sample analysis.	Maintain zero water discharge.
Emissions reduction	GHG intensity reduction	●	13% reduction in GHG emissions intensity achieved.	Reduce GHG emissions intensity by at least 1% and formalise our medium- and long-term targets.

● Achieved ● In progress

Corporate Social Responsibility



Uliana Levanova *Head of Welfare and Community Liaison*

“We are very proud of our enthusiastic, innovative and diverse team and continue to invest in their development. We are pleased to have been able to maintain positive and constructive relationships with our local communities and are honoured to be able to make a meaningful contribution in the form of employment opportunities, education, support and assistance.”

Key facts 2019

30%

Of employees occupying senior, executive and mid-level management positions across the business are female

62 hrs

On average training and education at the Pokrovskiy Mining College¹

20%

Increase in the number of employees involved in mentoring programmes

We regard our people as our most valuable asset and are committed to responsible employment practices, by promoting the fair treatment of our workforce, providing equal opportunity, preventing discrimination and upholding human rights, including our workers' rights to exercise freedom of association or collective bargaining.

We believe that attracting the best talent and maintaining an inspired, driven and enthused workforce with a strong culture, underpinned by our values of responsibility, innovation, integrity, excellence and sustainability is essential to our future success. We look to encourage the development of our employees by offering a high level of training and ensuring we engage with them in an appropriate way.

1. Scope includes employees of Amur region-based companies

Whilst the Board oversees governance, the SS&W Committee has overall responsibility for the key social aspects of the business and, along with the Board, evaluates the effectiveness of the Company's key social, human resources (HR) and ethical policies and procedures. The Group has site level HR departments at all our operations who report to their respective General Directors. They, in turn, report to the General Director of MC Petropavlovsk, who sits on the Executive Committee and can ensure an effective line of communication of all social issues up to Board level.

Ethics and human rights

Petropavlovsk operates with a strong emphasis on governance and ethical behaviour, underpinned by our culture and values. As a signatory of the UN Global Compact, we are committed to upholding the human rights of all our stakeholders, including employees, suppliers, contractors and partners and have a policy of fair dealing and integrity in place. We have developed a Code of Business Conduct and Ethics (the 'Code') which sets out our principles applicable to our employees and stakeholders. A comprehensive training programme is currently being developed to ensure that all aspects of the Code are understood and embedded in the Group's culture.

In addition to the Code, the main policies and procedures we have in place in order to address human rights are:

- Annual publication of Modern Slavery Statement, with on-line training provided to employees in both Russia and London in 2019;
- A Grievance mechanism for all our stakeholders, which has been implemented in line with the UN Guiding Principles on Business and Human Rights;
- Continuous engagement with our all our stakeholders; and
- HR policies in compliance with the requirements of the Russian Federation.

Anti-corruption

Petropavlovsk is committed to preventing corruption and the consequences of such actions. All anti-corruption initiatives are implemented with the direct support of the company's top management. All related matters are closely monitored by the Executive Committee and discussed in regular meetings. The responsibility for ensuring enforcement of any decisions is taken by the CEO, who then formally reports on this to the Board of Directors.

The Group has adopted certain policies and procedures to prevent, combat and reduce bribery and corruption and to reinforce its zero-tolerance approach. These include a Group-wide Anti-Bribery Policy, a Speak-up Policy (which provides detailed guidance on how employees can raise ethical concerns), a Standard Procedure for Processing Transactions, as well as internal controls for the implementation of related Federal Law. A clause aimed at preventing corruption is also included in the Code.

We have an explicit clause regarding anti-corruption within our contractual terms with all our suppliers, formulated in line with our Anti-Bribery Policy. No violations of anti-corruption legislation were identified in 2019.

In 2018, a grievance mechanism was initiated to enable employees and other stakeholders to raise any ethical concerns. No cases of unethical behaviour were reported through this channel in 2019.

We have various plans in 2020 to further strengthen initiatives in the business, including:

- Detailed implementation of Anti-Bribery Policy, approved by the Board in the beginning of 2020, throughout the Company's departments;
- Introductory briefings on the inadmissibility of corruption actions for employees and contractors; and
- Anti-Bribery training.

Our People

Our workforce

We aim to employ local residents wherever possible and we are proud of the fact that this enables people to find opportunities close to their hometowns in relatively remote areas of the Russian Far East. The vast majority of our workforce (65%) is from the Amur region, many of which mastered professions in mining and metallurgy at our Pokrovskiy Mining College.

Diversity and equal opportunity

Petropavlovsk is committed to operating as a responsible employer, both by promoting the fair treatment of its workforce through equal opportunity, and by the absence of discrimination required under both Russian

and UK law. The Group considers professional qualities of employees and is committed to providing equal opportunity to all, regardless of gender, ethnicity, race, disability or sexual orientation.

We are proud of the gender diversity demonstrated amongst our broader workforce, with around a quarter of our employees being female. The ratio of women in senior and executive positions across the business is higher still, reaching 35% in 2019.

Ksenia Maltseva Chief Technology Officer



We are proud of the many women we have in positions that traditionally have been occupied by men in the Russian mining industry. Ksenia Maltseva embodies the

development opportunities available to women at Petropavlovsk. Ksenia has recently returned to work after maternity leave and, given her position as Chief Technology Officer and Chief Engineer of Pioneer RIP Plant-2, she will be deeply involved in the commissioning of Pioneer flotation unit.

"After graduating from Tomsk Polytechnic University in 2007, I moved to the Far East of Russia and started as a hydro metallurgist at Pioneer - my first and only place of work. I then moved into the position of shift foreman and was promoted to production manager at RIP Plant-1. In 2013, having been directly involved in the construction and commissioning of RIP Plant-2, I was appointed as its Head Engineer.

I must admit, at first it was challenging, especially being new to an executive position, with responsibilities for all operational issues at the plant. I was able to rely on my prior experience and my authority, which I had nurtured and earned over time by working in different positions at Pioneer throughout my career - all of which enabled me to successfully lead a large team."

Rashida Mustafina Operator-technologist

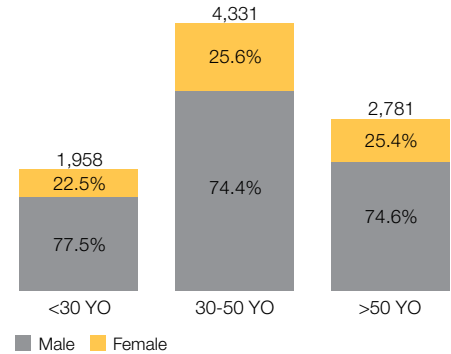


Rashida lives in Kazakhstan, where she previously worked at a copper refining factory. She holds two diplomas of higher education, in metallurgical

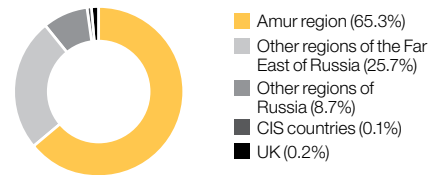
engineering, and economics. She first arrived at our POX Hub in February 2019, brought here by her interest in being a part of the most advanced operation in gold mining.

"It's now been almost a year since I started working at the Pokrovskiy Hub. The main difficulty for me was getting here as it takes two and a half days by plane or six days by train. However, I do not regret a single minute about my decision. Working in the mining industry feels like my predestination, but the POX Hub is more than mining. It represents cutting edge technologies. I like everything here - the operation, people and our team. I like being responsible for many issues, including safety procedures, reagent consumption rate, and so on. Before starting work, I was trained in-house, mentored, and then started working on my own. The autoclave does not divide people according to gender. Here it is experience and professional qualities that matter."

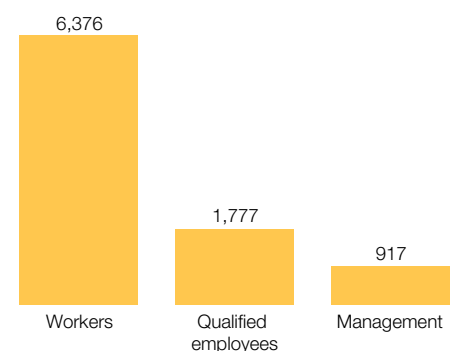
Petropavlovsk employees* by age and gender



Petropavlovsk employees* by region of residency



Petropavlovsk employees* by function



* reporting scope includes Amur region based companies, Moscow and London offices, Irgridmet, Hydromellurgy, PHM-Engineering.

27 people with disabilities are employed by the Group, with necessary adaptations made to working environments where required.

Employee communication

Employee engagement is facilitated via multiple channels, including the internal 'PokrovkaPlus' newspaper, which is delivered in both digital and print formats to ensure the involvement of any employees on site with limited computer access. The newsletter is also circulated to local residents and provides an important tool for responding to any community questions, with input in the publication from internal professionals with specialist knowledge of the subject in question. Social media constitutes an important engagement tool, with a Company Facebook and Instagram account in operation. Employee feedback can be directed to HR departments and the Head of Welfare and Community Liaison via e-mail or telephone. 120 such enquiries were made in 2019, with the most frequent topics being education and training opportunities, arrangement of the 25-year Company celebrations and requests for assistance in difficult personal circumstances.

Employee satisfaction

Turnover rate

2019	33.1%
2018	34.9%

We consider employee turnover to be one of the indicators that demonstrates our progress in building long-term relationships with employees. In 2019, we had a decrease in turnover of 1.8% compared to 2018. Whilst, we still consider current turnover rates to be quite high, we are pleased with the downwards trajectory. We believe that instability has been the main factor contributing to the high turnover of our

employees in recent years. However, we have now passed a turning point by bringing the POX project into operation, providing a stable future for our mines. In addition to this, the original chief operational team has now returned to successfully complete this project, thereby boosting morale and confidence.

Turnover rate is lowest in our offices, among management personnel and engineering and technical workers. Turnover is highest amongst workers on long shifts (30 consecutive days), especially those at our most remote mines.

Whilst Company loyalty is high amongst many of our employees, with over one third of our workforce having been with Petropavlovsk for more than five years, we recognise that we need to address turnover rates and are committed to reducing these to 25% by 2025. In 2020, we plan to introduce a survey for those leaving the Company in order to better understand the turnover issue. We will also conduct surveys throughout the year to monitor employee satisfaction, gather feedback and better understand material issues for our employees.

Employment practices, competitive remuneration and benefits

All employees are issued with contracts detailing their working hours, paid annual leave and other guarantees, in line with Russian or UK legislation (as applicable). In Russia, the Group operates in accordance with the Constitution of the Russian Federation, which details the rights and freedoms of citizens.

Petropavlovsk provides competitive remuneration to its employees, with our minimum salaries exceeding regional minimum wage by 83% and our average wages being 32% above the national averages. Both average and minimum Petropavlovsk wages increased both in

Roubles and in US\$ when compared to 2018. In order to motivate and encourage our workforce, the Group also has variable, performance-based components to remuneration, which is available for all employees who have worked for the Company for over one year. The performance-based component amounts to 20% of the wage, with two types of bonuses, one is paid over the period of one month (for employees of the month), and the other is paid over a period of one year (for employees of the year). The share of workers allotted with the wage bonus increased from 1,933 people (22%) in 2018 to 2,252 people (26%) in 2019.

Eligibility for performance-based bonuses is dependent on having no violations of work discipline and health and safety rules.

Social benefits, such as pensions, maternity/paternity leave, and employee assistance programmes are provided by Petropavlovsk. 212 female and 5 male employees took parental leave in 2019. The Group also pays for the employee assistance programmes which fund one-off payments in the case of childbirth, marriage, and medical treatment, funeral costs for close family, financial difficulties and natural disasters. In 2019, 1,072 employees received such assistance.

Non-compensation benefits for our employees includes health resort treatment and in 2019, 198 employees received holiday packages, with 164 employee children receiving vacation packages for summer camps.

Petropavlovsk* minimum and average salaries vs. regional and national average, US\$ per month

Average salary in Russia	659
Average salary in Amur region	688
Petropavlovsk average salary	872
Minimum salary in Amur region	271
Petropavlovsk minimum salary	496

*Amur region based companies only.

Living conditions and leisure opportunities at our accommodation camps

Shift patterns are organised in such a way as to promote uninterrupted operations, but also to allow employees to perform their duties whilst providing for family commitments. These patterns are usually either 14, 30 or 45 days at the mine with subsequent leave of the same duration. Whilst on duty, employees live on site in comfortable, hotel-style accommodation with access to leisure facilities.

At all Petropavlovsk mines, there are gyms, as well as outdoor sport courts for our employees to keep fit. Sports tournaments are held regularly in cross country running, chess, darts, volleyball, table tennis and football. In 2019, more than 500 people, including employees, contractors and interns, took part in a variety of sports tournaments.

Employee education, training and development

Employee education and development are critical not only to the Company but also to the mining industry as a whole and we take our responsibility to providing development opportunities seriously. We see this area of the business as vitally important not only to ensure that our workforce has the correct level of skills and abilities but also consider it to be an important way of improving employee retention by continuously furthering

the careers of our people. We take pride in our ability to innovate and therefore focus on providing a high level of technical training. We have systems in place within the HR department to assess the skills and educational requirements of our workforce and encourage our employees to constantly further their abilities and meet professional goals and ambitions. More than 23% of our employees hold university diplomas, with another 19% having obtained professional education. All employees, regardless of their education level, are trained and have access to in-house educational opportunities at the Pokrovskiy Mining College to master new skills and technologies.

Established in 2008, the Pokrovskiy Mining College is well equipped, has a modern campus and highly qualified teachers. This private, non-profit, innovative educational institution offers a wide range of in-house training courses, which include:

- Secondary education (training of mid-level specialists, skilled workers and employees);
- Additional education (retraining for a new activity, advanced training); and
- Professional training (with over 40 programmes available – ranging from analytical chemistry to electrical fitting).

– In 2019, over 2,600 employees were trained and educated at the Pokrovskiy Mining College, with the majority of these people coming from Pokrovskiy and Pioneer. A key training programme carried out during the year focused on POX Hub safety.

Mentoring and work experience programmes

With a balanced distribution of ages amongst our workforce, we have good opportunities for mentoring and transfer of optimal work practices. Mentoring programmes are designed to pass on work experience, knowledge, as well as corporate culture from our employees to those joining the Company, and to facilitate the induction and adjustment process. Mentoring programmes are also a part of vocational training for the students of our Pokrovskiy Mining College, as well as for university students and graduates during their internship with the Company. Employees acting as mentors are paid a bonus salary and, in 2019, 196 employees were involved in such programmes, representing a 20% increase from 2018.

In 2019, 217 students from Russian universities completed internships at Petropavlovsk, where they acquired a practical understanding of a modern mining enterprise operation. Many of these will return to the Company upon graduation.

Improving living conditions for our employees at the accommodation camp at Pokrovskiy

The launch of the POX Hub extended the life of the Pokrovskiy mine for decades and, in the summer of 2019, a renovation project started at the oldest accommodation camp, where some of the earliest buildings were constructed more than 15 years ago.

Commenting on the importance of the refurbishment programme, Anatoly Lapa, head manager of the POX camp said: *“The operation is expanding, and new employees and contractors are coming to site; many of whom are of the younger generation. Comfort is very important to them and therefore, if we want to attract this*

generation, it is important that we take account of their feedback and do our best to accommodate their requests. Some employees spend almost half of their time in our camps and therefore we are committed to ensuring they are as comfortable as possible.”

During the summer, four buildings were renovated and we plan to complete refurbishments to all other buildings in 2020. This involves rewiring, carrying out cosmetic repairs, replacing wooden windows with plastic frames, and sheathing external walls.

Our employee level of education



- Upper and compulsory secondary (44.8%)
- Elementary professional training (12.7%)
- Professional/Vocational education (19.4%)
- University degree (23.1%)

Collaborating with suppliers to improve training

In the summer of 2019, Petropavlovsk, together with Caterpillar, organised a professional skills contest among mining equipment operators (dump truck drivers, bulldozer and excavator operators).

The winners in each of the three categories were rewarded with a trip to Spain to visit the Caterpillar demonstration and training centre in Malaga. All the winners are

experienced operators, who had been with the Company between 6 to 10 years.

In Malaga, Petropavlovsk operators were given a tour of all the demonstration and training facilities. They were given the opportunity to become acquainted with Caterpillar technologies and programmes for monitoring road safety, obstacle detection, as well as new technologies the Company is

planning to implement. Petropavlovsk employees provided valuable feedback on operating Caterpillar machinery in the harsh weather conditions of the Russian Far East.

In 2020, Petropavlovsk and Caterpillar are planning to hold the competition again, and add additional stages, so that as many operators as possible have the opportunity to take part and test their professional skills.



Trade Union and freedom of association

We believe that upholding workers' rights is a fundamental way of maintaining an engaged and committed workforce. We recognise the rights of our employees to join a Trade Union, to bargain collectively or to engage in Trade Union activities.

A Trade Union was formed by Pokrovskiy employees and a Collective Bargaining Agreement (covering all employees, including those who are not unionised), between the Trade Union and the Company, was signed in 2006 for an initial duration of three years. Since then it has been renewed four times, with the most recent ratification in 2018.

Today, 1,599 employees are members of the Trade Union, consisting of 1,021 males, and 578 females. In a continuation of the Group's historical record, no strikes occurred during 2019.

In February 2020, the Board of Directors adopted a Freedom of Association Policy, officially recognising the rights of our employers and workers to join or create an employee organisation such as a trade union, a worker association, a worker council or committee for the promotion and defence of occupational interests of their choice, without negative consequences to them. This also includes the freedom not to be forced to join any of these groups.

Petropavlovsk operates in Russia, which has ratified the International Labour Organisation's Convention No. 87 (Freedom of Association and Protection of the Right to Organise, 1948) and Convention No. 98 (Right to Organise and Collective Bargaining Convention, 1949). In accordance with the laws of the Russian Federation, all employees are free to join or not join a Trade Union.

As such, we do not consider there to be a risk within the Group for workers' rights to exercise freedom of association or collective bargaining to be violated or at significant risk.

Photo by Pospelov Production

Petropavlovsk celebrates its 25-year anniversary

Award ceremonies, concerts, sporting and entertainment events were held at all of our mines in July 2019 to celebrate 25 years since the Group's foundation.

Longstanding employees, who have been working at Petropavlovsk for more than 5, 10, 15, 20 and 25 years respectively, received medals and salary bonuses.

Employees and their children were invited to take part in creative competitions, producing drawings, music compositions and videos to mark the occasion. One such video was

shot by employees of the Pokrovskiy mine, and featured over 150 of our colleagues. Singing and dancing groups performed at Pokrovskiy, one of our mines, which was brought into production in 1999. The following day, the groups visited Pioneer, where families of our employees living in the nearby villages, were invited to the concert to watch their relatives being rewarded for their dedication to the Company.

Employees at Albyn also organised several vocal and dance groups and performed

along with local children from the area in Zlatoustovsk.

A large celebration ceremony was held in Blagoveschensk, with all those present congratulated by the Group CEO Pavel Maslovskiy and an award was presented to the most highly commended Petropavlovsk employee. City and regional government officials thanked our employees for their work and praised their invaluable contribution to the economy of the Amur region.



Community engagement

Building long-term relationships with local communities and local residents is important to us and we aim to engage in an open and transparent manner. We have various channels through which we can seek community feedback and disseminate information about the Company, including the ‘PokrovkaPlus’ newsletter, social media accounts, as well as our Head of Welfare and Community Liaison.

Key facts 2019

US\$1.6 million

Of social investment

65.3%

Of our employees are from the Amur region

174km

High-voltage power line built in cooperation with the Government

We are committed to maintaining our ‘social licence to operate’ and are aware of our duty to engender and maintain the acceptance and approval of our local stakeholders. Recognising our responsibility to make a meaningful socio-economic contribution to the communities in which we operate, we have various tools in place to enable us to provide support and assistance. One of the most obvious inputs is the employment we offer (covered on pages [100](#) to [101](#)), but in addition to this we look to support the community through education (both at our College and also by providing assistance to educational institutions), other financial assistance through the Petropavlovsk Foundation, preferential local procurement and the provision of local infrastructure.

We value open and transparent engagement with our local stakeholders and look to uphold cultural traditions and respect indigenous communities.

The SS&W Committee is ultimately responsible for this area of the business, however we also have a Head of Welfare and Community Liaison who is tasked with day-to-day supervision and there is significant executive management input, with the General Managers at each mine administering the Company’s social initiatives in the local

communities and allocating the budget. The General Director of MC Petropavlovsk is responsible for establishing overall budgets for the community development projects and approving key areas of focus, both are which are subject to approval by the CEO.

We value open and transparent engagement with our local stakeholders and look to uphold cultural traditions and respect indigenous communities. Local community engagement is carried out at all our operations and we have various tools in place to facilitate this. Environmental Impact Assessments (EIA) are performed at all projects, with results disclosed in the public arena. Community development programmes are in place at each of our projects, based on local stakeholder requirements, with further information available on pages [105](#) to [108](#).

We review socio-economic data and statistics in order to further evaluate our approaches to community contribution.

Various community consultations and site visits were organised in 2019 to facilitate open dialogue with local residents, NGOs and regional and municipal level officials. A significant proportion of the local community attended these public consultations, with all information and data made available to attendees in advance of the meeting.

At the beginning of the year, residents of the Selemdzhinskiy District were consulted regarding the expansion of hydrotechnical facilities at Albyn. Questions arising during the meeting centred around the stability of the facility during emergency situations, construction safety. In December 2019, Petropavlovsk held public consultations in Ekimchan village to discuss the EIA of underground development of the Malomir Quartzitovoye pit. Company representatives gave local residents and other stakeholders an in-depth description of the technical features of the project. The key focus of the discussion was on the environmental safety review.

We have a Group-wide grievance mechanism in place covering all operations, which enables members of the public and other stakeholders to raise complaints or issues concerning the Company’s activities and to be assured that these complaints will receive due consideration and a written response. The introduction of the system was approved by the Board of Directors and implemented in 2019. Any complaints are registered online (with high internet connectivity in the Amur region enabling this process); only one was posted in 2019. We have therefore planned an information campaign in 2020 to raise awareness of the service and plan to trial and expand the number of communications methods in order to optimise the procedure.

Providing educational support in the Amur region

We are proud of the training we are able to facilitate not only for our employees but also for community members. By facilitating technical education, we not only contribute to the socio-economic environment but also develop a pipeline of local talent for the Company. School graduates in the Amur region have access to mining education at our Pokrovskiy Mining College, where study, tuition and accommodation are free for students for the duration of their training, and those who demonstrate outstanding results receive a stipend.

In 2019, 34 students graduated in mining and electrical equipment maintenance and 12 people received training as mid-level specialists in analytical chemistry. All of these former students are now employed by Petropavlovsk. Training at our college is becoming increasingly prestigious and competitive, with five applications for every entrant in 2019.

Community site visits



We organise community site visits to ensure that local residents understand our operations and to maintain a strong, transparent level of dialogue with them. In 2019, Albyn and Malomir were visited by high school students living in neighbouring villages. They observed operations at the mine, visited the chemical laboratory, and toured RIP plants and accommodation camp. Students and their teachers enquired about environmental protection measures, operational performance and employment prospects. Children were most impressed by the Caterpillar trucks, whereas the interest from teachers mainly centred around the high-tech equipment used at the chemical laboratory and at the plant.

Site visits were also arranged throughout the year for local NGOs, industry authorities and analysts and investors.

Petropavlovsk also has a partnership with leading universities in the Amur region. For example, we partner with the Faculty of Natural Sciences of Blagoveschensk Pedagogical University on the education of qualified staff for the Group's analytical laboratories. The faculty celebrated its 85th anniversary this year, and was presented with computers and laboratory equipment by the Company.

Supporting indigenous communities

Our Albyn mine is located approximately 20km from Ivanovskoye village, with a population of c.370 people, the majority of which are Evenk, an Indigenous people of the Amur region. This village is located in a traditional gold mining area, where alluvial gold has been mined since the 19th century, and various local companies (which are not part of the Group) continue to mine alluvial gold in the vicinity.

We recognise that prior to the commencement of mining at Albyn by Petropavlovsk, past alluvial operations have sometimes negatively impacted the Evenk community and their surrounding environment, without creating any meaningful benefit for them. As one of our primary stakeholder groups in the region, we are committed to protecting their rights, acknowledging that they face similar socio-economic challenges to others in the region but are also confronted with the unique issue of saving their culture and traditional lifestyle. Our approach in this regard also aligns with legislative framework in the

Russian Federation aimed at guaranteeing the rights of Indigenous people.

As a part of Petropavlovsk's commitment to respect and form long-lasting relations with the Indigenous Community, Albyn mine signed an Agreement with the Association of Indigenous Minorities of the North of the Selemdzhinsky District in 2019, legally represented by its head Sergey Nikiforov. Under this agreement Petropavlovsk has committed to assisting in the development of the local community.

This is an important step both in terms of the basis of the Agreement but also the cooperation it demonstrates and the engagement and dialogue with the community it enables. The Agreement provides the Evenk community with a transparent framework that enables them to identify their priorities and plan the community's development.

This forms part of Petropavlovsk's policy to support Indigenous communities in their effort to save their native language and pass it on to the next generations. By supporting the socio-economic development of the village, we aim to improve quality of life for the Evenk community. In November 2019, the Company sponsored the participation of schoolchildren from Ivanovskoye village and their teacher in the 'Turen-2019' conference, dedicated to the language and culture of Russian Evenks and the Orochons of the Northern China.

In 2019, Petropavlovsk also supported the Evenk community to facilitate their traditional reindeer herding. There were no incidents of violations involving rights of Indigenous peoples in 2019.



Petropavlovsk Foundation

Petropavlovsk provides direct support to local communities through the Petropavlovsk Foundation. Established in 2010, the Foundation invests in programmes aimed at encouraging socio-economic development, improving the quality of life for local communities and maintaining a positive socio-cultural environment. Support is informed by the local community development programmes at each of our operations which is based on local stakeholder needs.

The Foundation's social projects fall under 6 strategic areas:

- Education;
- Future generations (child development);
- Research and development;
- Culture;
- Quality of life; and
- Sport.

Key projects in 2019

In 2019, the Petropavlovsk Foundation continued to support social and educational institutions, regional NGOs, and significant public initiatives throughout the Amur region. Some of the key areas of support we offer through the Foundation are as follows:



Childcare and school facilities The creation of modern and safe conditions for pupils in preschool and educational institutions of the Amur region is one of the significant areas of work of the Petropavlovsk Foundation.

In 2019, we took part in providing drinking water to nurseries in the Mazanovskiy district, which suffered from a massive flood in the Amur region in the summer of 2019. Water in the village is supplied from drill holes and wells, however, lab tests showed that it was not suitable for drinking. The Petropavlovsk Foundation acquired the necessary equipment for water treatment. The clean water was secured, and the nurseries opened their doors. Another project in 2019 involved buying playground equipment for schoolchildren in Tygda village, where many Pokrovskiy employees live.

Sport In order to develop grassroots children's football in the Amur region, the Petropavlovsk Foundation continued its cooperation with the Amur regional Children's Football League. We contributed to an international tournament, local competitions among football teams, advanced training courses for coaches and master classes with professional football players. Over 500 children benefited from the programme. In 2019 the Foundation conducted the ninth annual Open Petropavlovsk Cup football tournament. Amateur athletes from Amur villages competed, as well as Petropavlovsk team.

Culture and history The 'Albazino Expedition' project was supported by the Foundation, aiming to facilitate research and development of the historical and cultural heritage of the Amur region.

“The Albazino Expedition” A Cultural and Historical Awareness Project

In 2017, the Petropavlovsk Foundation was awarded a Presidential Grant for Non-Governmental Organisations worth RUB1.7 million, which was used to film a historical documentary called the “Albazin’s legacy” charting the discovery and subsequent development of Siberia and the Russian Far East by early Russian explorers, including the founding of Russia’s first city on the Amur River in the XVII century and the Albazin fortress.

Through documenting the unique cultural heritage of this region, the project has greatly benefitted school children and the wider community, and an exhibition of various findings and artefacts from the project is also on display in Moscow at the Streletsky Chambers museum following its opening at a

ceremony attended by Vladimir Medinsky, the Minister of Culture for the Russian Federation.

The documentary has been made available on YouTube in Russian with English subtitles (www.youtube.com/watch?v=-gz95mplL0_w&feature=youtu.be) and has been shown at venues across the Far East, including the Amur Autumn film festival in 2018, the History department of the Russian Academy of Sciences and the Streletskie Chamber Museum in Moscow. It has also been sent to all schools and Universities in the Amur region where feedback has been overwhelmingly positive, particularly from schoolteachers.

Given the success of the project, the Foundation considered it logical to talk about

the next important stage in the history of the region, when the territory became part of Russia again in the mid-19th century. At the end of 2018, the Foundation again won a RUB2.4 million Presidential Grant for filming another documentary focusing on this period.

The Foundation also published a book in 2019 spanning 500 years of the region’s history in collaboration with Novosibirsk University and using materials from the filming of the Albazin Expedition.

In 2020, the Foundation plans to publish a book for children about the history of the Russian Far East, make a new documentary film and exhibit items found during the making of the Albazin Expedition.

Contributing to infrastructure and quality of life

Some of our operations are located in remote areas, with inherent transport and accessibility issues, specifically in the northern Selemdzhinskiy district. Petropavlovsk actively invests in the construction of infrastructure, which is instrumental to the development of our projects but also significantly improves the quality of life for local residents. Ways in which we are able to contribute to local infrastructure through the sharing of our services include:

- Funding and constructing road networks, including the car and pedestrian bridge across the Karaurak River, built by Petropavlovsk for a cost of RUB13 million and opened in 2019;
- Allowing emergency services and services such as sanitation and forest protection to

use our helipads, thereby enabling quick and qualified assistance to residents of remote areas; and

- The construction of a high-voltage power line in 2019 in cooperation with Government, providing our enterprises (including the Malomir flotation line) and local villages with a reliable electricity supply. The 220 kV, 174km long transmission line (February-Rudnaya) and a 220 kV substation in the village of Koboldo (Rudnaya) were successfully tested at the end of 2019 and launched in early 2020.

Economic performance

We are aware that one of the most significant positive contributions we can make is the economic value we bring to our stakeholders and the regions in which we operate. Given the remote location of our mines and the local

socio-economic environment, this is considered to be our most material impact and one that we take very seriously. We are committed to the transparent payment of taxes, preferential recruitment of local people with fair and favourable remuneration, prioritised spend with local suppliers and community-led investment and support. Strong economic performance by the Company directly impacts all our stakeholders and enables us to contribute to sustainable development and provide long-term benefits.

In 2019, Petropavlovsk distributed US\$559.2 million, which included payments to suppliers, wages and benefits to our employees, taxes, and US\$1.6 million invested in local community projects in the Russian Far East.

Direct economic value generated and distributed, US\$ million

	2019	2018	2017
Direct economic value generated	744.8	503.6	588.2
Revenue	741.6	499.8	587.4
Interest	3.2	3.8	0.8
Economic value distributed:	559.1	375.3	450.7
Operating costs (suppliers)	313.3	217.5	270.8
Payment to employees (wages and benefits)	131.1	101.5	103.6
Taxes ¹	53.3	26.3	50.1
Payments to capital providers ²	59.9	29.5	25.9
Community investment	1.6	0.5	0.3
Economic value retained	185.7	128.3	137.5

Notes:

¹ 2017 figure includes \$19.9 million of mineral tax accrued in 2016;

² Interest expense net of capitalised interest;



Vladimir Novikov *Health & Safety Officer*

“We recognise the impact on our employees of the remote locations of our operations and the sometimes-harsh weather conditions. Therefore, our task as health and safety management is to protect their safety, sustain their health and support them in every way possible. I am pleased to note a strong improvement in safety performance across our operations in 2019, demonstrating a significant achievement for all the team, with a notable reduction in LTIFR. However, we are careful not to become complacent and look to continue further enhancing performance going forward.”

Key facts 2019

0

Fatalities

30 hrs

On average of safety training per employee

36%

Improvement in LTIFR

Our people are central to the success of our business and we recognise the health, safety and wellbeing of our workforce and contractors as one of our key responsibilities.

At Petropavlovsk, we promote a strong culture of responsible health and safety management and are focused on its continual improvement. Our overall objective is to minimise the risk of accidents and of occupational illnesses, and to avoid fatalities. In 2019, we continued working towards our goal of “zero-harm”, with the safety of our people remaining our number one priority.

Our health and safety practices are overseen by the Board, with the Board-level SS&W Committee meeting regularly to assess and evaluate Occupational Health & Safety (OHS) management systems. General Managers at each operation are responsible for overseeing the safety of workplaces at sites and protecting the health of our employees. We also expect them to set examples through leadership and model correct behaviours. We believe that safety is our collective responsibility and employees at different

levels of the business actively partake in the development of health and safety programmes and policies. Every employee is involved in decisions relating to collective safety, ranging from the use of personal protective equipment (PPE) to advanced protective automotive systems.

It is our duty to all our stakeholders to comply with health and safety legislation and all relevant regulations in the regions in which we operate and we incorporate all legislative developments into our health and safety standards in timely manner as they arise. Beyond this, Petropavlovsk strives to align with industry best practice, both in Russia and internationally.

OHS management systems are an integral and essential part of our approach and have been developed in line with OHSAS 18001 and based on the guidelines on occupational safety and health management systems of the International Labour Organisation (ILO-OSH 2001). These guidelines are aimed at protecting workers and contractors from occupational hazards and minimising risks, while improving productivity. Our health and safety policies are applicable to all employees as well as contractors and everyone is informed of any amendments to procedures as required. Our contractors are regularly audited for health and safety practices to encourage and improve performance; they also take part in health and safety meetings held on sites.

An important element of our safety approach is the development and promotion of a strong safety culture within the Group, based on behavioural practice.

Our health and safety strategy is based on the following commitments:

- Providing a safe working environment for all employees;
- Ensuring full compliance with the legislation of the Russian Federation;
- Minimising the risk of accidents and occupational illness; and
- Providing high quality, task-specific training.

Any employee at our operations is able to effectively contact health and safety officers either in person, using communication devices (radio, phone, e-mail) or through their foremen on site – whether before, after or during the shift. This system enables workers to come forward with any health and safety related proposals – be that in the form of a complaint or a suggestion to improve conditions in the workplace. In addition, employees are encouraged to request any required information or clarifications on specific health and safety guidance if they are unsure of the relevant procedures.

OHS risk assessment

Risk management is integral to our health and safety practices and Petropavlovsk conducts regular and rigorous risk assessments to ensure we protect our workforce. By requiring our workplaces to adopt and apply a risk-based approach, we are in a better position to more effectively and efficiently control the highest risk workplace hazards.

The risk assessment process consists of:

- Assessing workplace hazards and assigning a level of risk to them;
- Controlling workplace hazards;
- Ensuring that the appropriate education, relating to the principal risks, is provided to the workforce through seminars and ‘toolbox’ talks as well as social media; and
- Ensuring that risk assessments are carried out at the appropriate frequency.

Petropavlovsk collects and evaluates data on 'near miss' incidents in order to quantify the risk and evaluate its frequency and impact in order to mitigate workplace health and safety hazards.

The most common Health & Safety risk categories have been slipping and falling (predominantly in winter), machine maintenance, road transportation and accidents occurring during loading and unloading. Whilst these categories are still relevant today, we have seen a declining exposure as employees become more aware through ongoing education.

Daily risk assessments are performed at each stage of an employee's work and, should any hazard or risk be identified, the assignment is not commenced before the risk is removed or mitigated to the appropriate level.

Employees are encouraged to report any work-related hazards without reprisal, and we have a system in place to enable this, which involves a reporting or signalling system, whereby the employee should inform his foreman of any identified risk. In accordance with the specifics of the risk, the foreman then either stops the working process until the hazard is removed, and if necessary, engages higher management, or, if possible, enables the immediate elimination of the risk prior to commencement of work. Workers may remove themselves from any unsafe situations until such time as the risk has been removed.

Safety training

All our employees are provided with safety training and education and all employees, contractors and any other visitors undergo a safety induction upon arrival at any of our sites.

Safety refresher courses and exams are mandatory on a six- or twelve-monthly basis (depending on the profession). Targeted safety training is also provided for those carrying out tasks outside of their usual scope of work. In the event of an incident, investigation findings are presented to all involved, with specialised training provided to reinforce rules, regulations and practices.

Safety reporting

All accidents resulting in a lost time injury (LTI) are recorded, analysed and investigated by the onsite safety committee to determine the cause of the accident, address issues and improve systems to prevent recurrence. They are then reported to the Management Company, the Executive Committee and Board. Group management strategies implemented at

Health & Safety at the POX Hub

In line with our focus on health and safety, the new POX Hub has a robust employee verification security system, training, and personnel admission. The safety management system was developed in order to achieve a greater level of control and maintenance of necessary qualifications.

In 2019, employees from several specialist functions, including the hydrometallurgical division, and pump and crane operators, underwent specific health and safety training at the Pokrovskiy Mining College, where they were awarded the necessary certificates to continue their function or to enable promotion into other functions.

Employees from all functions and plant management underwent nuclear safety training according to Federal programmes run by leading Russian universities. This was undertaken to ensure that staff at the pressure oxidation plant have the necessary radiation safety training required under a new clause of the State

licence issued to the plant. A scheduled site visit was made by the Federal watchdog, overseeing radiation safety in the sector, and the operation successfully passed the inspection. In addition, the Emergency Localisation and Response Plan for the POX Hub was approved by the Ministry of Emergencies.

As part of the Group's general OHS programme, an annual medical examination took place at the POX plant, which included x-ray examinations of all plant employees to detect lung disease or related issues. An annual mandatory vaccination programme was also conducted to protect employees against the encephalitis tick, which is prevalent in the region.

In 2020, we are planning to introduce new software aimed at automating certain health and safety procedures in order to minimise paperwork and enable health and safety officers to focus on more essential tasks at the site.



all sites are aimed at reducing the number of accidents, leading to a lower LTIFR.

Regular internal on-site inspections are carried out to ensure that working environments are safe. External audits are conducted by various Russian authorities to confirm compliance with the legislation.

Fatalities

2019 0

2018 1

2017 3

Incident investigation and prevention

Having investigated and scrutinised the accidents that have occurred at our operations over the last three years by type and root cause, we have determined the following areas of increased focus going forward:

- Operation and maintenance of automotive equipment;
- Road safety; and
- Slips, trips and falls.

This has enabled the initiation of a focused health and safety programme across the Group. Safety memorandums were circulated to familiarise employees with incidents and briefings and tailored training were carried out. Corrective measures were introduced to address each of the focus areas and targeted health and safety campaigns continue to be carried out to prevent reoccurrence of incidents. Various measures were implemented in response to the fatalities that occurred in 2018 and 2017, which included: refresher or targeted health and safety training to reinforce the risks and remind employees of hazards, and where appropriate, seasonal threats. As a result of all these measures, several HSE parameters have demonstrated steady improvement.

A road safety campaign was conducted from January to March 2019, which resulted in a decrease in automotive accidents.

In 2019, US\$2.6 million were spent on initiatives aimed at improving industrial safety and occupational health. The majority of funds were spent on the provision of PPE, conducting medical examinations of employees, voluntary health insurance and on OHS training.

Emergency preparedness

In order to minimise potential risks and hazards at our sites, the Company regularly conducts emergency drills. These are based on emergency preparedness plans, involve different exercises and engage both the workers of the mines, as well as medical specialists and firefighting units. It is vital that everyone knows their role and is prepared to participate should the circumstances require. Training and education here are of great significance.

In addition to ensuring readiness amongst the required personnel, we need to ensure that all machinery and equipment are in the best possible condition. This requires adherence to the maintenance schedule and monitoring and control of relevant vehicles and machines on a daily basis, as appropriate.

Emergency preparedness performance is reviewed as part of our regular internal and external audits.

Health

At Petropavlovsk we pride ourselves on our commitment to providing a healthy working environment for our employees. All our sites are equipped with medical facilities, which are accessible to all employees with doctors and essential medication available. Annual medical examinations are conducted to assess the health of our employees, as well as provide vaccinations. All personal data of our employees, including that of their health

status, is kept confidential in accordance with Russian legislation and is protected under the Company's confidentiality policy.

We promote a healthy lifestyle among our employees and all sites have sports facilities, including football pitches, volleyball courts, table tennis tables and gymnasiums. Every year we organise sports competitions to boost the team spirit of our workforce and to encourage healthy living.

Employees of pre-retirement age with medical conditions are sent to healthcare resorts to improve their health. In addition to the standard state insurance which covers all of our employees, 26% of the Group's employees have taken up the option of private medical insurance, provided by the Group, which includes outpatient, dental care, doctor home visits and an ambulance service. 70% of the Group's total workforce undertook a health examination in 2019, which is mandatory for all operational personnel and voluntary for the office personnel.

In accordance with Russian legislation, we record all occupational (work related) and recordable (non-work related) diseases which occur at a place of work and affect an employee's health. The most commonly occurring occupational diseases in the past three years were vibrational disease, hearing loss and radiculitis. However, the number of cases of these and other occupational and recordable diseases remain low with 11 having been identified in 2019.

Recently, additional diseases were introduced into the register reflecting the wider range of medical diagnostics, and more rigorous medical examinations.

Measures have been taken to carry out stricter monitoring of the effect of equipment and impact of the work zone on employees' health and the impact in the work zones. Along with this, medical treatment of occupational diseases' is provided to those necessitating such.

As part of our ongoing Health & Safety initiatives, all drivers across the Group are required to undergo a medical check-up before the start of each shift.

Antismoking and anti-alcohol campaigns are conducted on a regular basis in form of flyers and 'health talks' during health and safety trainings and briefings. Alcohol consumption is strictly prohibited on site.







Vera Usova *Head of Environmental Safety Department*

“Petrovavlovsk’s environmental specialists are enthusiasts, who are devoted to attaining their goals. They work tirelessly to protect our natural environment, continuously monitoring any potential negative impacts and always looking to responsibly manage and improve environmental performance at all stages of our operations from construction, through production to rehabilitation.”

25 years of protecting nature

At Petrovavlovsk, we recognise that our mining operations have the potential to negatively impact the natural environment and therefore our main aim is to prevent environmental harm wherever possible. We also have policies, systems and tools in place to manage, reduce and mitigate these impacts. We are cognisant of the negative influence on the Company’s licence to operate should any environmental impacts exceed acceptable limits and strongly believe for our business to have a lasting future, we must recognise our responsibilities and strive to continually improve our environmental performance.

Key facts 2019

13%

Reduction GHG emissions intensity

Zero

Water discharge

54%

Of waste rock re-used

Zero

Environmental fines

Since its formation, Petrovavlovsk has been committed to upholding the highest standards of environmental management. Effective environmental protection is a key element of our business strategy and it is fundamental to our day-to-day operations, planning and decision making.

Recognising that our operations involve a number of environmental risks, we have developed Environmental Management Systems (EMS) that help identify and manage those risks and achieve resource and energy efficiency. EMS at all our operational sites are fully certified for compliance with ISO 14001. Our environmental risk management strategies are based on continuous and rigorous monitoring, training, external assurance by the state bodies and emergency preparedness. Detailed emergency response plans are developed and approved every year. All environmental risks are included in the Group-wide risk matrix which is reviewed and updated on regular basis.

We have environmental policies in place at all our sites, which are regularly reviewed and updated as the business evolves and develops. The policies serve as guidelines of the precautionary approach to environmental challenges adopted by the company.

Petrovavlovsk manages its operations in accordance with stringent Russian environmental legislation which regulates discharges to air, water, soil, tailings and waste management. The Group is developing and using advanced technologies, equipment and materials with the aim of reducing the consumption of natural resources. The environmental impact assessment ('EIA'), which evaluates the state of the environment and anticipated impact on water, mineral resources, land, soil, air and biodiversity for each of our projects, is fundamental to the management of our operations. The areas covered by the EIA are closely monitored over the life of the project and thereby form the basis of our environmental approach.

Transparency and stakeholder engagement form a vital part of environmental

management by the Group. We hold public hearings to facilitate feedback on our projects from the local community.

General and specialised environmental training is regularly organised for our specialists and directors in areas such as waste management, environmental safety and emergency preparedness.

The S,S&W Committee oversees and is responsible for ensuring that appropriate systems are in place to manage environmental and compliance risks (read more in the Governance section [page 135](#)). The importance of the Group’s environmental commitment is also reflected by the close involvement of the senior executive team. Environmental reports are prepared monthly basis for internal use and quarterly updates are published on the Group’s website. Executive Committee reviews these on regular basis together with detailed analysis of the Group’s environmental performance and information on documentation or controls set up during the period.

Monitoring and auditing

The Group conducts regular monitoring of groundwater, rivers and streams, soil, air, plant and animal life, both to determine their state and also better understand the impact of our operations.

Our commitment to applying a rigorous approach to environmental management is reflected in the range of measures that have been implemented to monitor and control discharge to air, soil and water, as well as protect biodiversity and limit the consumption of reagents and chemicals. Samples are collected and analysed in the Group’s state-accredited laboratories and the data analysed in detail by the relevant authorities to confirm compliance.

External audits and on-site reviews are regularly conducted by environmental auditors. In 2019, the Group was a subject to six official environmental audits conducted by various state and local authorities. There were no violations found.

Environmental Stewardship continued

The Group continued improving its excellent track record in environmental management, as reflected in zero licence violations and zero environmental fines for nine consecutive years. The Group has adopted a grading system for environmental incidents based on their potential or real impact, from 1 for minor incidents to 3 for the most serious. Category 1 incidents are classified as temporary lapses in normal environmental procedures, which once identified, may be remedied with no detrimental impact on the environment. In 2019, there were no serious or moderate environmental accidents recorded, the number of minor incidents in 2019 was almost three times less than in 2018.

Environmental incidents

Category	2019	2018	2017
Category 1 - Minor	19	53	41
Category 2 - Moderate	0	0	0
Category 3 - Serious	0	0	0

Water management systems

Water is an essential resource, which is shared with our host communities, natural ecosystems and wildlife, and Petropavlovsk is therefore committed to responsible usage. Our operations are located in non-water stressed areas, typically with surplus of natural water.

Water forms an integral part of our processing operations and is used for dust suppression and domestic services. Water consumption at the Group's operations is carried out in strict accordance with quotas set out in our licences and our water intake does not deplete surface or underground water sources. All operational sites are designed as "zero-discharge" facilities and recycled water systems are in place. Such systems allow us to minimise the freshwater intake from local sources by maximising the use of recycled water. Our water management systems and aims, which form an integral part of our EMS, are based on the original EIA for each project and then constantly updated by

our environmental specialists to ensure they remain in line with regulation; we also look to surpass legislative requirements where possible, as demonstrated by our significant water recycling capacity. Water reuse is one of the key elements to our water management strategies - all operational sites are designed as "zero-discharge" facilities and recycled water systems are in place.

The quality of surface and underground water is monitored on an ongoing basis, and the analysis of water samples recorded in the state register. At the end of each year, a report is prepared and submitted to all relevant state bodies. Maximum permissible concentrations were not exceeded for any pollutants in 2019.

Water supply for domestic and industrial needs is provided by surface and underground water sources. Intake wells are generally located close to where water is consumed, including shift camps, factories,

mining transport complexes and each well is licensed and certified as compliant with sanitary norms and rules. Water supplied for household purposes undergoes treatment and is made safe in accordance with applicable standards.

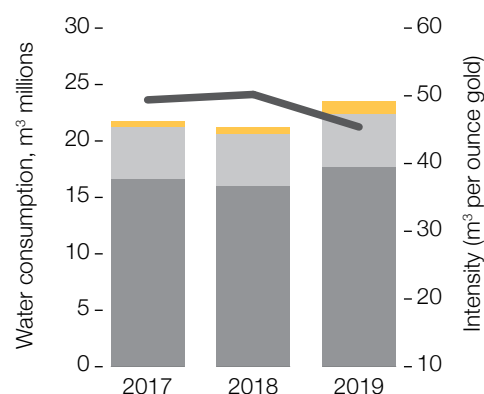
Domestic effluents are purified at sewage treatment facilities using biological treatment, post-treatment and disinfection. Purified water is returned to the recycling water supply system or used for dust suppression. Pit waters and rain and snow-melt waters from shift camps are collected, purified and sent to the recycling water supply system or used for dust suppression. Water hydrotechnical dams are utilised in the recycling water supply system

Whilst overall water consumption increased in 2019, the intensity, which enables us to monitor efficiency, has improved by 10%, demonstrating the effectiveness of the Company's strategy on water management.

Freshwater withdrawal

	Units	2019	2018	2017
Underground	m ³ million	1.13	0.66	0.52
Surface	m ³ million	4.71	4.55	4.57
Total	m ³ million	5.84	5.21	5.09

Water consumption by source



	Units	2019	2018	2017
Intensity	m ³ /oz	45.4	50.2	49.4
Underground	m ³ million	1.13	0.66	0.52
Surface	m ³ million	4.71	4.55	4.57
Recycled and re-used	m ³ million	17.64	16.01	16.65
Discharged	m ³ million	0.00	0.00	0.00
Total water consumption	m ³ million	23.49	21.22	21.74

Water use is reported to authorities in m³. To convert to megalitres, divide by 1,000.

Achieving zero-discharge water target

BioDisc is a modern technology utilising a natural biological process for the treatment of wastewater based on the principle of rotating biological contactors (RBCs). This process has many inherent operating characteristics that make it ideally suited for the treatment of wastewater. The BioDisc process requires less electrical energy than other treatment processes and is environmentally friendly due to the fact that it does not require open ponds or exposed tanks.

BioDisc treatment facilities were first built in 2009 at the Pioneer mine and then subsequently at Pokrovskiy, Albyn and Malomir in 2010, allowing the Group to achieve zero water discharge to surface and underground waters. An additional benefit of BioDisc is that surplus sludge can be used in land rehabilitation in order to make the soil more fertile.

The Group's operations benefit from the production of renewable energy in the Amur region, generated from two major hydropower dams, which are not only a reliable source of low cost and high value electricity but also play an important role in flood management.

In 2019 the Group achieved a 27% reduction in coal usage compared to 2017 and we will continue to reduce our reliance on this resource in order to reach our ultimate target of becoming a coal-free business by 2030.

Overall electricity usage increased in 2019 in line with the elevated production levels, however, we recorded a significant improvement in energy intensity (11%), demonstrating the success of our energy efficiency measures.

Energy consumption and carbon emissions

Mining and processing are energy intensive activities, with various sources of energy in use. Diesel is used in fixed and mobile equipment, kerosene is used in our helicopters and petrol in cars. Electricity is used for heating and charging fixed mining equipment. Coal is used in heating plants. The Group's electricity supply is purchased; predominantly from the national grid. Each of the Group's operations has direct access to electric power. Mining operations such as stripping, transportation infrastructure, waste storage facilities and energy use are all sources of air emissions which can impact on people and the environment if not managed properly. These include carbon dioxide as well as nitrogen, sulphur oxides and dust emissions (covered in detail on [page 116](#)).

The Group's energy strategy is based on the requirements of Russian legislation and is also aligned with best international practices. All the Group's facilities are constructed in compliance with Federal Law, which specifies obligations surrounding internal microclimates and other operating conditions that ensure efficient use of energy resources.

We are committed to decreasing the amount of energy used at our operations, and this is one of the key focus areas of our business. We have a Group wide energy saving programme, which is based on the implementation of modern technologies and includes the following measures:

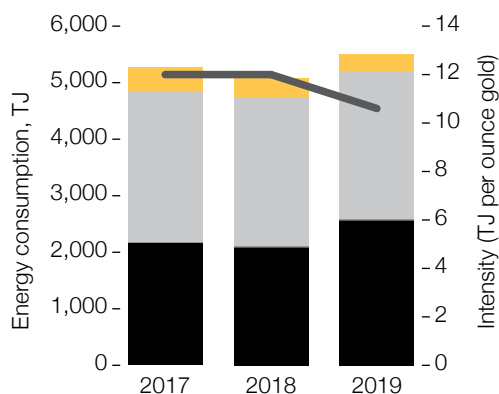
- Compact space-planning solutions for buildings and their strategic positioning;
- Use of modern equipment with increased efficiency;
- Use of energy-saving light sources (LED lamps) and automatic control of outdoor lighting;
- Placement of switchgears near the location of concentrated loads; and
- Use of a frequency-controlled electric motor drive of technological equipment. This allows the operator to maintain the required speed when changing the load on the motor shaft, thereby reducing energy consumption.

Climate change

Recognising the impact of carbon emissions on climate change and the global imperative to address this, we look to manage and minimise GHG emissions omitted by our operations. Our reduction strategies are focused on the implementation of energy efficiency measures, which have the added benefit of cost savings, and we have employed the following strategies across our operations:

- Optimal control schemes of rock mass management to prevent multiple movements of the same material;
- Monitoring blasting and crushing in order to obtain optimum coarseness for the material sent to the processing plants;
- Using grinding technologies and mills with a light rubber lining also contributing to energy savings;
- Using electrical mining excavators; and
- Installing a Waste Heat Recovery system at the POX Hub.

Energy consumption by source



	Units	2019	2018	2017
Intensity	TJ/1koz	10.7	12.0	12.0
Coal	TJ	325	330	446
Diesel	TJ	2,598	2,642	2,650
Petrol	TJ	32	24	20
Kerosene	TJ	2	4	4
Electricity	TJ	2,552	2,076	2,156
Total energy consumption	TJ	5,510	5,076	5,276

Energy consumption for 2017 and 2018 has been restated due to a conversion error in figures reported in 2018.

In order to manage our GHG emissions over the long term and to align our business reporting with the Task Force on Climate-related Financial Disclosures (TCFD) framework, with we have committed to the implementation of the following measures over the next 5 years:

- Undertaking climate scenario planning;
- Setting a science-based greenhouse gas emissions reduction target; and
- Carrying out a feasibility study for the construction of a solar panel plant.

We have reported on GHG emissions since 2007 and it is a strategic KPI for the business.

The climate in the Amur region, where the Group's assets are located, is characterised by long, cold winters and short, hot summers, with average temperatures ranging from -27°C to +42°C in the south. Despite these climatic variations, Petropavlovsk's hard-rock mines operate throughout the year, with the probability of extreme weather being factored into all facilities and machinery design.

Consequently, our key operations are likely to be unaffected by increases or decreases in average temperatures that may arise as a result of climate change.

The Amur region is landlocked, so the Group is unlikely to be affected by rises in sea levels and, although water is essential to mining, it is unlikely that the Amur region will be affected by drought due to climate change.

Rising temperatures could affect some exploration activities which rely on the ground being frozen (and not boggy). The impact of prolonged winters is not thought to be significant as the majority of the Group's production comes from all-year-round hard-rock mining.

The Group recognises the importance of addressing climate change and is planning to review and analyse the climate change risks posed by its operations in 2020. We are also planning to initiate reporting of carbon emissions to CDP in 2020. For more information on GHG emissions please go to [page 88](#).

In addition to risks, we see opportunities within the context of climate change, which may include a potential benefit to the Group from an increase in gold demand due to heightened market volatility, uncertainty and risk.

By instigating measures to reduce emissions and adapt to climate change, we also see an opportunity to further reduce our energy consumption which in turn will lead to cost savings.

Air quality and emissions control

Air is one of the four basic elements sustaining life on our planet and we take great care in preserving its quality. The Group implements effective measures to minimise air pollution and to reduce concentrations of harmful substances at ground level. All the Group's operations hold state-issued permits regulating the discharge of emissions to atmosphere. Emissions are strictly monitored according to a complex programme agreed with the federal authorities.

We aim to prevent the discharge of harmful substances to the environment by implementing the following measures at our sites:

- All emissions points are equipped with gas purifying equipment, which is monitored on a regular basis;
- All technical equipment and vehicles are checked according to the maintenance schedule to ensure that they fully comply with all requirements;
- Dust suppression by irrigation; and
- Modern ventilation systems.

Air emissions

Air pollutant	unit	2019	2018	2017
Sulphur oxides (SOx)	t	234.4	231.5	192.1
Nitrogen oxides (NOx)	t	1,835.7	1,867.0	827.5
Solids (dust emissions)	t	1,005.3	965.0	551.1
Volatile organic compounds (VOCs)	t	278.5	295.2	154.2
Carbon oxide (CO)	t	1,117.5	1,110.6	679.5
Other	t	250.0	250.8	159.8
Total	t	4,721.3	4,720.2	2,564.2
Intensity	t/1 koz	9.1	11.2	5.8



Environmental Stewardship continued

Creating value from waste

In 2017, the Group developed a detailed technical specification to enable waste rock from our operations to be sold to third parties as a natural stone for use in the construction industry. Following comprehensive laboratory testing, the specification was successfully certified, and surplus waste rock has been sold since then. Demonstrating our commitment to responsible mining, all profits received from the sales are used for environmental protection measures.

Focus on sustainable waste management and resource efficiency

We are committed to the safe and responsible management of waste and implement waste management programmes, approved by regulatory authorities, at all operations. Waste management data is reviewed independently by local authorities.

We aim to reuse and recycle waste wherever possible and have systems and procedures to maximise this strategy, thereby minimising waste to landfill. Where we cannot utilise, reuse or recycle waste, we dispose of it at our own waste facilities or transfer it to authorised contractors for recycling.

The Group focuses on the efficient use of resources, as well as reuse and recycling and implements the following initiatives as part of this strategy:

- Used mineral oils are processed and used in the CleanBurn air heating system;
- Tyres are re-used following the application of a new tread to the tire body;
- Non-hazardous ash is used as an insulating layer at the solid waste landfill;
- Excess sludge from biological sewage treatment facilities is used in land rehabilitation to increase soil fertility; and
- Waste materials contaminated with oil or petroleum products are utilised at the Group's Thermal Waste Treatment Plant.

In 2019, the Group re-used 46% of its waste; 98% of waste transferred to third parties was recycled. The generation of waste increased in line with the production capacities.

Non-mineral waste

	unit	2019	2018	2017
Total waste generated:	t	9,390.2	8,005.4	7,499.6
Non-hazardous	t	8,491.8	7,454.1	6,950.1
Hazardous	t	898.4	551.3	549.5
Reused	t	4,312.7	2,278.6	2,981.0
Neutralised	t	117.3	96.1	80.9
Disposed at own landfill	t	2,995.0	2,859.7	1,124.3
Transferred	t	1,926.6	2,742.8	2,338.1

Small amounts of waste generated at the end of the year are accumulated at temporary waste storage sites before being disposed.

	unit	2019	2018	2017
Waste re-used	%	46	28	40
Intensity	t/1koz	18.1	19	17.1

Mining generates a significant amount of waste rock as overburden needs to be removed to uncover the ore deposits. While fertile soil is stored to be used in land rehabilitation, waste rock is used in a wide range of construction works and backfilling. Surplus waste rock is sold to third parties as a certified natural stone.

Mineral waste

	unit	2019	2018	2017
Waste rock generated	t	69,848	88,348	114,924
Re-used	%	54%	48%	67%

Preserving biodiversity

Protection of biodiversity remains one of our main priorities and we work hard to ensure that wildlife and local habitats are protected for future generations through all stages of mine life. The Company does not operate in any protected areas or regions with high biodiversity value.

Before a mine becomes operational, the Group outlines potential impacts of the operations on wildlife, along with the measures and actions to

be taken in order to manage and mitigate these possible risks. This procedure, which is part of the EIA, has an important role in the Group's decision-making. Biodiversity management plans, outlining preventative measures and prohibited activities, are developed and implemented at all our operations.

The Group has never operated in or adjacent to protected areas or areas of high

biodiversity value, in line with Russian legal requirements and regulations.

Petropavlovsk has developed a biodiversity management programme based on the following initiatives:

- Preventing pollution and minimising its environmental impact;
- Minimising noise levels as far as possible;

- Minimising and controlling the disposal of food waste which could attract wildlife;
- Use of “cat’s eye” road reflectors and other wildlife deterrents near areas close to moving vehicles, as well as wildlife awareness warning signs for drivers;
- Monitoring discharges to air, soil and water;
- Installing digital bird repellent systems to protect waterfowl; and
- Maximising use of all brownfield sites.

We have various biodiversity strategies in place to protect flora and fauna and to avoid contamination of local rivers, ponds or streams, which include:

- Prohibition of felling trees or clearing wooded areas using heavy machinery, such as bulldozers, flooding of forest land, dumping waste or rubbish, fishing, hunting or poaching and driving vehicles outside designated zones or existing roads;
- Replenishing aquatic biodiversity in local rivers, in partnership with the Federal Authority on Fishery and Biological Resources Preservation of Amur region (Amurybvod), with over US\$185,000 having been spent in restocking over the last six years; and
- Annual information campaigns to raise awareness of forest fires, which can

‘I volunteer’ environmental campaigns

Employee participation forms an integral part of our environmental protection strategies. Annual volunteering campaigns are carried out at our operations and not only assist in environmental management but also serve to unite and encourage collaboration amongst our employees. Such campaigns usually take place in April and May and involve cleaning the areas adjacent to production facilities in preparation for the summer months. In addition to this, employees plant flowers and remove dry grass and dead wood to prevent forest fires close to the mines during the fire-hazardous period.



have a potentially devastating impact on biodiversity. Our experience shows that the use of billboards, posters and warning signs at our operations as well as in the surrounding area (such as at rest areas on the motorways) has a noticeable positive effect.

Monitoring of wildlife is an integral part of the operational environmental control and is carried out in accordance with the approved programme.

We were able to measure the outcomes of various biodiversity management strategies in 2019, and specifically saw success with an absence of birds were recorded where bird scarers were put in place, and road warning signs proving effective in raising awareness of animal migration routes.

In 2020, we plan to review our biodiversity management programmes and start developing a Group-wide Biodiversity Policy.



Working together to prevent forest fires: high alert seasons

Large parts of the Amur region are wooded which means that forest fires could quickly spread if not managed adequately, with potentially devastating effects on wildlife, the environment and local communities. The risk of forest fires is considered to be greatest in May, putting significant pressure on firefighters. Therefore, security measures are strengthened at all our operations at this time. Each mine has a dedicated fire brigade with specially trained fire fighters and stations with a wide range of fire-fighting equipment and fire-resistant workwear. Our teams are on duty 24/7 and fire safety briefings and drills are carried out on a regular basis. Our firefighting teams assist local villages with house fires emanating from local forests when required.



Land rehabilitation

It is the Group's intention to ensure that after decommissioning the landscape will be restored as far as possible to its original state. Closure plans for our operations are prepared as part of the initial permitting process and are updated as the mines approach the end of their operating lives.

The financial provisions to cover the cost of the rehabilitation are regularly revised to reflect the operational and financial changes.

Ongoing rehabilitation is an integral part of the mining operations at all sites – as an example of this, after the heaps and piles are levelled, pine seedlings are planted. It is the Group's

intention to restore landscape to its original state as far as possible after decommissioning.

To date, the Group has not decommissioned any of its operations as the Pokrovskiy mine is the only project to have reached end of life and its facilities have been fully utilised for reuse by the POX Hub.

	unit	2019	2018	2017
Total disturbed land	ha	10,241	11,219	11,261
Rehabilitated land during the reporting period	ha	1,043	305	3,004

More than 510,000 tree seedlings have been planted by the Group over the last three years, with pine having been chosen due to its high survival rate. The advantage of planting seedlings on an artificial surface such as a heap is that within ten to fifteen years the seedlings will be guaranteed to be protected from wildfires.

Cyanide levels are strictly controlled in pulp, surface and ground waters. All facilities are fully compliant with the Russian legislation and environmental monitoring results are provided to the authorities on a regular basis.

Cyanide consumption, t

2019	5,330
2018	6,295
2017	7,720

Cyanide management

Cyanide is widely used in gold mining to extract metal from ore. The Company applies a rigorous approach handling, monitoring and storing cyanide due, to its hazardous potential.

Enhanced security measures are also implemented at all stages of cyanide handling, transportation and storage. Only authorised personnel are allowed to transport cyanide and all transportation is logged. Cyanide is stored in locked, guarded warehouses with concrete floors and access limited only to qualified personnel, which is closely monitored by security staff.

Hydraulic Storage Facilities Management

Key facts 2019

8

Hydraulic storage facilities

0

Hazardous incidents

Regular

Internal and external audits

Approved

Safety Declaration

As part of the normal process of mining and recovering gold, various types of Hydraulic Storage Facilities (HSF) are required for further processing or storage of residues created after the initial ore processing.

Petropavlovsk is fully committed to upholding the highest standards of environmental management, occupational health and industrial safety. We continuously focus on zero-harm principles and ensure the transparency of our operations.

The process of designing and operating HFSs is controlled by Group management and overseen by state supervisory authorities in accordance with stringent Russian legislation. There have been no incidents relating to the integrity or stability of the Group's HSFs over the entire period of operation.

Optimal management of HSFs is one of the most important areas of focus for the Group, and all HSFs are insured, operated and monitored in accordance with Russian legislation and in line with international best practices.

Our HSF strategies, which are based on a complex measures to ensure the highest standards of design and construction, are aimed at minimising risk and enabling safe functioning and operation.

In order to ensure the safe operation of HSFs a comprehensive system of internal control has been established under the Safety Monitoring Programme approved by the Chief Engineer. Each enterprise of the Group has a senior member of management who is responsible for the safety of HSFs management. The system of monitoring safety of the hydrotechnical facilities includes: the dikes, the beach area, the containment pond, the area where the hydrotechnical dam is located, pulp pipelines, recirculation water pipelines, pumping stations, environment (air, soil, eater, flora, fauna), roads, communications, lighting, staff education and training, availability of operational documents.

All specialists and management working at HSFs are certified in the area of dam safety. Specialists involved in operational management of HSF are also required to pass a test at least once every five years in accordance with Rospirodnadzor regulations.

The risk of HSF failure is included in our HSE risk management systems, with examinations and monitoring performed daily. Hydrotechnical dams are designed and built in full compliance with the requirements of Russian legislation and incorporate detailed geological studies. As a result, all the Group's HSFs are considered to be highly reliable and low risk, due to careful and professional management of these facilities.

Hydrotechnical dams are located in controlled access areas away from any local populations. The nearest populated settlement is located 6km away from Albyn HSF. Approved routes for vehicles and pedestrians are clearly displayed at the hydrotechnical dams. Warning safety signs for the hazardous zone and controlled access area are displayed at the entrance.

Civil liability insurance contracts for causing damage as a result of an accident at a hazardous facility are in place and respective insurance policies are issued for all the HSFs.

A reviewed and approved detailed emergency response plan is developed every year. The state appraisal on the emergency preparedness and ability to protect the population and environment as result of an accident is issued by the Russian Emergency Ministry in the Amur region.

Table of current HSF

Enterprise	HSF	Raising method	Status	Distance in km from the closest populated settlement
POX Hub	HSF-1	Downstream	Active	8
Pioneer	HSF-1	Downstream	Active	40
	HSF-2	Downstream	Active	40
Malomir	HSF 1	Upstream	Not active, preparation for mothballing	
	HSF 2	Upstream	Active	
	HSF 1-2	Upstream	Active	40
	HSF 1-3	Upstream	Active	
Albyn	HSF-1	Downstream	Active	6

Environmental Stewardship continued

In line with legislation, all Group's HSFs are registered in the state register of hazardous production facilities and receive state certificates corresponding to their hazard class. At present, the hazard class of operating hydraulic structures corresponds to the second class, high hazard.

Environmental monitoring and protection of wildlife is an obligatory part of the Operational

Environmental Control carried out in accordance with the approved Environmental Monitoring Programme. The monitoring data is included in the annual report submitted to the state bodies of all levels.

Detailed closure plans are prepared three years before the actual closure. The plan provides a mechanism for ensuring the financing of these works. This project is

co-ordinated with the state bodies of the Regional and Local government and in accordance with the environmental requirements of the Russian Federation. It also undergoes the State Environmental review.

The annual audit undertaken by Rostekhnadzor in 2019 did not identify any violations.



Environmental Protection at the POX Hub

The pressure oxidation process is regarded as the most efficient, robust and environmentally responsible way of processing a diverse range of refractory concentrates. Our POX Hub is designed in line with the latest environmental technologies, with the aim of maximising the use of resources and minimising any negative impacts.

Our achievements

- Maximum use of previously disturbed land;
- Waste and resource management systems in place;
- Environmental monitoring programmes (for water, air, soil and noise) have been developed, approved and implemented;
- Biodiversity management plans have been approved and implemented; and
- Zero discharge and recycled water supply systems are in place.

The Group operates its POX Hub in strict compliance with the requirements of Russian legislation, ensuring environmental safety of all its facilities. Continuous environmental monitoring is carried out to identify the potential environmental impacts and any actions that are required. Data is collected and processed in accordance with a strict schedule approved by supervisory authorities. The POX Hub has all required water use licences, with related quotas determining water sources and permitted withdrawal volumes.

Autoclave leaching technology requires a significant amount of industrial water in its processes; therefore, we have implemented a water supply recycling scheme to conserve resources, as demonstrated below. As part of this, grey waters from the pit are being used in the POX Hub water supply systems, and rain and snow-fall waters are collected, purified and used for dust suppression. Such systems allow a significant reduction in clean natural water usage at the POX Hub.

2019 was the first full operational year for the POX Hub. In order to monitor and analyse its environmental performance a set of environmental and strategic KPIs have been established.

Environmental KPIs 2019

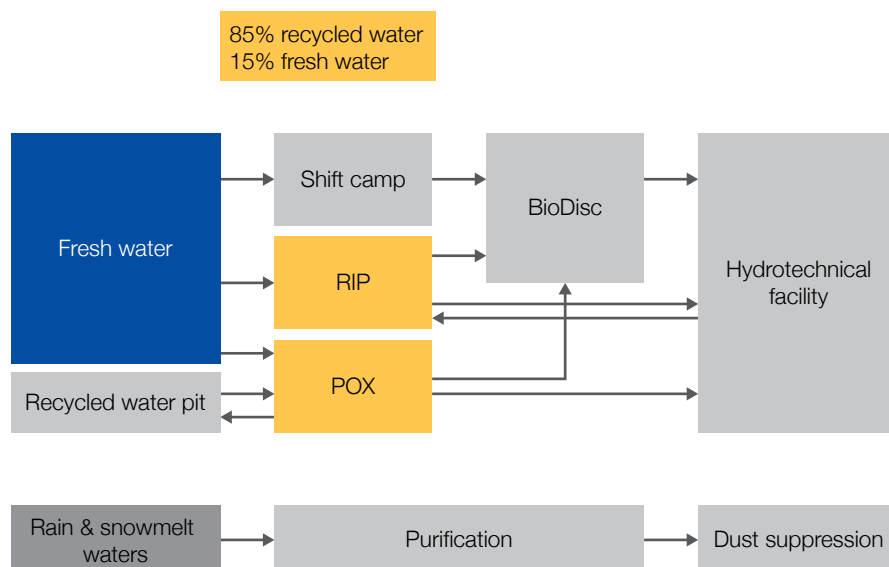
	unit	
GHG emissions	t CO ₂ e	69,143
Energy consumption	GJ	776,629
Water consumption	m ³	3,796,788

Strategic KPIs 2019

	unit	
GHG intensity	t CO ₂ e/oz	0.39
Energy intensity	GJ/oz	4.33
Water intensity	m ³ /oz	21.15

In 2020, we will analyse the environmental data on a quarterly basis so that targets for the next three years can be determined.

Water use and recycling system at the POX Hub



Independent Limited Assurance Statement

1 Introduction

1.1 Terms of Reference

Wardell Armstrong International (WAI) was engaged by Petropavlovsk PLC (Petropavlovsk) to provide independent, basic limited level assurance of the sustainability section of the 2019 Petropavlovsk Annual Report, hereafter referred to as “the sustainability section”. This assurance statement focuses on the way Petropavlovsk manages sustainability performance, and how it communicates this in its sustainability reporting. This assurance statement also includes an assessment of Petropavlovsk’s performance and progress regarding three requested KPIs.

1.2 Professional standards applied and level of assurance

WAI were engaged to provide a basic limited level assurance in accordance with internationally recognised standards namely, AA1000 Assurance Standard; ICMM Assurance Procedure and International Best Practice. With more detailed or reasonable assurance required for the following three Key Performance Indicators (“KPIs”):

- Greenhouse gas emissions;
- Water consumption; and
- Lost time injury frequency rate.

1.3 Limitations and Exclusions

Due to the level of assurance required a high-level overview of data supplied to WAI was undertaken. Additional information, not reviewed, may lead to differing understanding or interpretation than that presented here within.

The information that was assured and its presentation in the sustainability section are the sole responsibility of the management of Petropavlovsk. WAI was not involved in the drafting of the Report. Our sole responsibility was to provide independent assurance on its content.

2 Methodology

2.1 Activities Undertaken

In support of the Assurance, WAI undertook the following activities:

- Site visit to Petropavlovsk assets, namely: Pokrovskiy, Pioneer, Malomir and Albyn;
- Visit to Petropavlovsk head office in Blagoveschensk;
- Interviews with relevant key personnel of Petropavlovsk;

- Review of internal and external documentary evidence produced by Petropavlovsk used to inform the sustainability section of the 2019 Annual Report;

- Audit of performance data presented within the sustainability section of the Annual Report, including detailed audit of three KPIs; and

- Review of Petropavlovsk data and information systems for collection, aggregation, analysis and internal verification and review.

3 Findings

On the basis of our described methodology, the data provided, and our understanding of the activities carried out by Petropavlovsk, we provide limited assurance of the sustainability section. Our findings are as follows:

- Sustainability aspects of the Petropavlovsk operations are managed in a way that ensures compliance with Russian Legislation;

- The information and data included in the sustainability section are accurate, reliable and free from material misstatements;

- Information in the sustainability section is for the most part clearly presented and understandable (see below for comment regarding Lost time injury frequency rate). The section is well laid out and is accessible to Stakeholders;

- The sustainability disclosure provides a fair representation and allows readers to form a balanced opinion regarding Petropavlovsk’s sustainability performance during the 2019 period;

- The reporting has been prepared in accordance with the GRI standards (core option) and includes appropriate consideration of the Reporting Principles;

- Petropavlovsk has appropriate systems in place for the collection and analysis of environmental KPIs. Based on data seen by WAI, it is deemed Petropavlovsk have a robust monitoring system, ensuring consistency in the quality and assurance of reporting;

- For the most part Petropavlovsk has processes in place for consultation and engagement with key internal and external stakeholders. It is understood that some corporate level policies are still being rolled out at site level, a systematic approach to information dissemination would assist in this regard; and

- Petropavlovsk’s management and site teams show support to a company-wide commitment to responsible mining practices at operations and projects.

3.1 Greenhouse Gas Emissions

Current reporting is considered to comply with AA1000 AS. An appropriate and robust mechanism for the collection, reporting and auditing of greenhouse gas emission data is in place. Data reporting, regarding GHG emissions, could be made more rigorous by the inclusion of additional emission streams currently excluded, however, the most significant emissions are accounted for and the data therefore is considered representative. Accuracy of GHG emission reporting is summarised as follows:

- Scope 1 emissions are covered and most likely within +/-5% - currently emissions from explosives and ground disturbance are excluded although this is considered likely to contribute a relatively small amount;
- Scope 2 emissions are covered and expected to be within +/-5%, based on the use of published grid emissions factors by IEA ; and
- Scope 3 emissions are not currently accounted for. Petropavlovsk are looking at including this in 2020. Including Scope 3 emissions is considered best practice but under the GHG Protocol reporting of Scope 3 emissions is optional.

3.2 Water Consumption

The water data presented in the Environmental Stewardship section is clear and understandable. It highlights the principal trends in water consumption which were shown to increase in 2019 whilst also recording increasing water recycling rates in the mineral processing operations. The inclusion of water intensity data demonstrates an improvement in this year’s water cycle management and efficiency.

3.3 Lost time injury frequency rate

The KPI presented is the Lost Time Injury Frequency Rate (LTIFR). LTIFR is a measure of safety and is clear and understandable. The LTIFR KPI data displayed is for the whole company. The figures presented are accurate and are a mean based on data for each of the individual sites.



4 Adherence to the principles of AA1000AS

4.1 Inclusivity

The sustainability section identifies groups of key stakeholders and details forms of information dissemination that are utilised by Petropavlovsk for both internal and external stakeholders. The sustainability section clearly lays out and communicates what engagement and social activities have been completed in 2019. Petropavlovsk adheres to the requirements of Russian legislation, some effort has been made to start moving towards international best practice (namely, IFC Performance Standards) through the development of site-specific Stakeholder Engagement Plans. WAI observed stakeholder consultation and community development activities being implemented across Petropavlovsk sites.

4.2 Materiality

Petropavlovsk conducted a materiality assessment during 2019 taking industry and business trends as well as internal and external stakeholder feedback into account. The process undertaken revealed key aspects that were identified as both important to stakeholders and having significant impact to the business. Five key materiality aspects were identified, these are overarching themes that comprise of multiple KPIs.

4.3 Responsiveness

Petropavlovsk has developed minimum requirements and systems to respond to Stakeholder issues in their grievance mechanism. The grievance mechanism is presented on the Petropavlovsk website and requires internet access. The mechanism presented is comprehensive, following a 6-stage procedure. Petropavlovsk have set a time frame for response of 20 days but no more than 45 days from receipt of complaint. During 2019, two comments were submitted via the grievance mechanism, however on review these do not represent grievances, the mechanism has instead been used as a basic form of contact. Whilst the Grievance Mechanism has not been formally rolled out across project affected communities, a disclosure programme is planned for 2020.

5 Statement by WAI of independence, integrity and competence

WAI is an independent technical engineering company that specialises in engineering, health, safety, environmental and social management with over 180 years history of providing technical and audit advice to the

mining industry. WAI has no vested interest in any particular technology, supplier or contractor.

Work was carried out by an independent professionally qualified team with experience in sustainability reporting and environmental and social audits. No member of this team has a business relationship with Petropavlovsk, its Directors or Managers, beyond that of verification and assurance of sustainability data and reporting.

WAI confirms no conflict of interest exists with respect to this commission.

Approved by:



Alison Allen
Technical Director

27 April 2020

The Strategic Report was approved by the Board on 26 May 2020 and signed on its behalf by:

Sir Roderic Lyne
Non-Executive Chairman

26 May 2020





Introduction from the Chairman

Dear Shareholder

On behalf of the Board, I introduce Petropavlovsk PLC's annual Corporate Governance Report for the financial year ended 31 December 2019.

Corporate governance has played a significant part in the striking improvement in the Group's performance, reputation and value over the past year.

When I was elected Chairman in 2018, one of my key objectives was to strengthen corporate governance within the Group and ensure that it met both the letter and the spirit of the 2018 UK Corporate Governance Code. I wanted Petropavlovsk to have a strong, independent, highly qualified and diverse Board, actively engaged in the strategic decision-making and oversight of the Group.

I am glad to report that we have met this objective. We have reinforced the management and oversight of audit; finance; risk; health and safety; environmental, community and workforce issues; and are placing increasing emphasis on ESG. We have a goal of continuous improvement.

With the appointments of Katia Ray and Charlotte Philipps, on 8 November 2019, and Danila Kotlyarov and Maxim Kharin on 21 April 2020, and the proposed appointments of Fiona Paulus and Tim McCutcheon on 27 May 2020, the Board will have, in addition to the Chairman, two Executive Directors (the CEO, and Chief Financial Officer), one Non-Independent Director, and eight independent Directors. The Independent Non-Executive Directors have a notably wide range of relevant experience; with a balance of ages and nationality. Following my retirement at the Annual General Meeting, three of eight Independent Directors, including my designated successor, will be highly qualified women. This reflects the commitment we made to diversify gender representation on the Board.

We have reorganised the Board's Committees. Each Committee is working to a full agenda under strong and experienced leadership. Harry Kenyon-Slaney, who was appointed Senior Independent Director in April 2019, has brought his expertise in the mining industry to bear on the Safety, Sustainability and Workforce Committee, to notable effect. Robert Jenkins continues to be a skilled and committed Chair of the Audit and Remuneration Committees and has devoted a great deal of time to the upgrading of the audit and finance functions. Damien Hackett has conducted a review of risk management. As the Chair of the Risk Committee from March 2020, he is introducing a new approach to risk, informed by best practice and tailored to the needs of the group. I continue to chair the Nominations Committee.

On 30 July 2019 Bektas Mukazhanov, who was a non-executive Director nominated by Fincraft Holdings Ltd (as the Group's major shareholder) resigned from the Board, Fincraft having sold its shareholding to Aeon Mining Limited ('Aeon'). In consequence, on 14 October 2019, we welcomed Mr Mirzaaziz (Aziz) Musakhanov to the Board as a nominee of Aeon. Mr Musakhanov resigned from the Board on 5 February 2020 following Aeon's decision to sell its shareholding in Petropavlovsk. On 21 April 2020, the Board appointed in his place Mr Maxim Kharin, a nominee of the new major shareholder, the Uzhuralzoloto Group of Companies. In each of these cases, a Relationship Agreement has been signed between Petropavlovsk and the nominating company and ultimate beneficial shareholder.

In April 2019, all members of the Board visited the Group's operations in the Far East of Russia. The Board visited laboratories and research facilities in Blagoveschensk, the mining and processing operations at Malomir, and the Pressure Oxidation Plant at Pokrovskiy. Directors had the opportunity for extensive conversations with managers and other staff representatives in each location and were impressed both by the quality of the operations and the skill, commitment and high morale of the Group's personnel.

Consultation with shareholders

Board members have stayed in regular contact with the Group's shareholders.

In accordance with corporate governance practice, I wrote to a number of significant shareholders who had voted against certain resolutions at the 2019 Annual General Meeting. (Six resolutions proposed at the AGM received less than 80% support of shareholders who voted, with two resolutions failing.) The Senior Independent Director and I had constructive meetings with two of the shareholder groups who took up the invitation to discuss the resolutions. We have sought to address the issues raised by shareholders and those advising them. One issue was the previous lack of gender diversity on the Board. This has now been resolved, as described above. Another issue raised with the Board related to the level of bonus disclosure in the Directors' Remuneration Report (the 'DRR'). This was considered by the Chairman of the Remuneration Committee, Robert Jenkins, and I hope shareholders will find that this has been satisfactorily addressed in this year's DRR.

Board activity during the year

Significant tasks, aside from those mentioned above, on which the Board focused during the year included:

- Development of the Group's future strategy: This was the subject of a Board Strategy Day held in October 2019 and carried forward at subsequent Board meetings. It is covered elsewhere in this report;
- Liability management, including the refinancing of the Group's 9% Convertible Bonds due March 2020 (the '2020 Bonds'). The Board approved and launched a new US\$125 million 8.25% Convertible Bonds due 2024 which not only refinanced the 2020 Bonds but enabled the Group to accelerate the construction of the Pioneer flotation plant;
- An option agreement with the owner of 25% of TEMI LLC, which holds the Elginskoye licence. (This was the subject of an RNS announcement of 23 September 2019). The objective is to facilitate the expansion of the Group's Albyn mine; and
- The future of Petropavlovsk's c.31% share of the Hong Kong-listed iron-ore mining company (and former subsidiary) IRC.



The Board's s172 Companies Act 2006 Statement is provided on pages [24](#) and [25](#). This details how the Board considered not only our shareholders but our wider stakeholders in its decision making during 2019. A vital part of the Board's responsibility includes understanding the views of our stakeholders (employees, shareholders, local communities, suppliers, regulators and governments) and building constructive relationships with them.

25th Anniversary year – employee and community engagement

Petropavlovsk celebrated its 25th anniversary on 1 September 2019. The Group's growth and development over that period – starting from scratch in the early days of the Russian Federation's market economy in a remote and climatically difficult region – is a remarkable story. The Group now employs more than 9,000 people, the majority of whom are residents of the Amur region. We have been instrumental in the development of the local infrastructure. We have constructed bridges and roads in the area in which we operate, provided energy supplies and installed cellular communications all of which have benefited the local community.

As the largest regional employer, Petropavlovsk has a significant role to play in the community. We take these responsibilities seriously. The Company has built a strong reputation locally through a variety of activities ranging from philanthropic initiatives to the provision of emergency assistance during periods of flooding.

In 2008 the Group established the Pokrovskiy Mining College. This private, non-profit educational institution offers a wide range of in-house training courses with study, training and accommodation free for students. It is the only higher education institution of its kind in the region. To date it has trained more than 10,000 specialists, providing much-needed skills for the local market. Many of our employees are graduates of the College.

Culture and Purpose

Petropavlovsk's purpose is clearly defined as part of 'Who we are' and set out on page [1](#) to [3](#).

The updated UK Corporate Governance Code, published in July 2018 (the '2018 Code') requires Boards to assess and monitor culture. We must also provide an explanation of the Company's approach to investing in and rewarding our workforce. Our employees are pivotal to the Company's success. Further detail is provided on pages [100](#) to [104](#).

We are a company which bridges the differing systems, cultures and traditions of the United Kingdom and the Russian Federation, and has responsibilities in both jurisdictions. Petropavlovsk is one of a small number of Russian-based companies with a listing on the London Stock Exchange and stands apart from many Russian natural resources companies by the diversity of its shareholder register. Our responsibility to all of our stakeholders, our respect for the culture of both countries, and the example we seek to set through strict adherence to the highest standards of governance and management are values which permeate the Board's decision-making.

We have respect for the environment in which we operate. We recognise our responsibility to minimise any impact on biodiversity by ensuring that wildlife and local habitats are protected through all stages of mine life. Further details are provided in the Sustainable Development section on pages [84](#) to [123](#).

During this year's Board visit to our mining operations, Harry Kenyon-Slaney (in his role of Safety, Sustainability and Workforce Committee Chair) and other members of the Board held meetings with representatives of our workforce and of the local union. This was a constructive beginning to a new process of engagement between non-executive Directors and the Group's employees which we intend to continue on at least an annual basis.

We aim to promote a healthy workplace culture and one that is inclusive and collaborative. We contribute to the local community, in which the majority of our workforce resides. By investing in training, we seek to develop the full potential of our employees.

In December 2019, Petropavlovsk joined the United Nations Global Compact initiative on corporate sustainability. This is a voluntary leadership platform which reflects the Board's commitment to aligning our operation and strategies with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption. We have recently reviewed and updated our 'Speak-Up' and Anti-Bribery policies. We continue to pay our workforce competitive salaries which exceed regional and country averages.

By these actions we promote a culture of integrity, openness and respect within the Company. The Board recognises that this is pivotal to delivering the long-term success of the Company.

The following pages set out details of the Company's corporate governance arrangements, processes and activities during the year, and reports from each of the Board Committees.



Sir Roderic Lyne
Non-Executive Chairman
26 May 2020

Board of Directors

An experienced, diverse and well-balanced Board



The Rt. Hon. Sir Roderic Lyne
Non-Executive Chairman

Nationality: British
Appointed: June 2018

Experience

Sir Roderic Lyne was first appointed to the Board in April 2009 upon the Company's merger with Aricom PLC, and was appointed as the Senior Independent Director in November 2015. He was also Chairman of the Company's Remuneration and HSE Committees. Sir Roderic continued to act in such a capacity until June 2016, when he retired as a Director. He was subsequently appointed as Chairman of Petropavlovsk following the Company's AGM on 29 June 2018.

Sir Roderic was previously a Non-Executive Director of Aricom PLC, a position he held from October 2006 until April 2009, and a Director of the Russo-British Chamber of Commerce from April 2006 to July 2009. He served as British Ambassador to Russia from January 2000 until August 2004, and speaks Russian.

Sir Roderic is a former Non-Executive Director of Accor, Senior Advisor successively to HSBC, BP and JP Morgan, Deputy Chairman of the Council of the Royal Institute of International Affairs (Chatham House) and Chairman of the Governors of Kingston University. He was a member of the Committee of the Iraq Inquiry and was appointed to The Privy Council in 2009. Sir Roderic was a Non-Executive Director of JP Morgan Bank International.

External Appointments
None.



Dr Pavel Maslovskiy
Chief Executive Officer

Nationality: Russian
Appointed: June 2018

Experience

Dr Pavel Maslovskiy, a professional metallurgist, co-founded Petropavlovsk with Peter Hambro in 1994 with a single greenfield licence in the Amur region, organically expanding the business into one of Russia's largest gold mining companies. Starting out with a small team of mining professionals, as Chief Executive, Dr Maslovskiy oversaw the development and construction of four highly successful mines.

Under his leadership and technical know-how, Petropavlovsk successfully built and commissioned its Pressure Oxidation Hub (POX) in 2018, a unique, state-of-the-art modern processing plant, that is producing gold from complex ores, both its own and third-party sourced.

Dr Maslovskiy has made a significant contribution to Russian society by founding and leading the work undertaken by the Petropavlovsk Foundation for Social Investment.

Prior to embarking on his successful business career, Dr Maslovskiy was a Professor of Metallurgy at the Moscow Aircraft Technology Institute. He is the author of more than 100 printed scientific papers, copyright certificates and co-author of various textbooks in the field of metallurgy.

Dr Maslovskiy's achievements and contribution, to the Russian mining industry and society has been recognised with awards from the Ministry of Education, the Administration of the President of the Russian Federation and the Administration of the Amur region.

External appointments
Director of XAU Resources Inc.



Mr Harry Kenyon-Slaney
Senior Independent Director

Nationality: British
Appointed: November 2018

Experience

Mr Kenyon-Slaney has over 37 years of experience in the mining industry, principally with Rio Tinto. He is a geologist by training and his experience spans operations, marketing, projects, finance and business development. Mr Kenyon-Slaney is a member of the board of directors of Schenck Process AG. Until 2015, Mr Kenyon-Slaney was a member of the Group Executive committee of Rio Tinto where he held the roles of CEO of Energy, and before that CEO of Diamonds and Minerals. Prior to this he led Rio Tinto's global titanium dioxide business, was CEO of Rio Tinto's listed subsidiary, Energy Resources of Australia Ltd, was GM Operations at Palabora Mining Company in South Africa and held senior marketing roles in copper, uranium and industrial minerals.

He began his career as an underground geologist with Anglo American on the gold mines in South Africa. Mr Kenyon-Slaney has a BSc Geology from Southampton University.

External Appointments
Mr Kenyon-Slaney, is currently Non-Executive Chairman of Gem Diamonds Limited, Non-Executive Director of Sibanye Gold Limited (trading as Sibanye-Stillwater) and a senior advisor to McKinsey & Co.



Mr James W Cameron Jr
Independent Non-Executive Director

Nationality: American
Appointed: October 2018

Experience

Mr Cameron, a US qualified lawyer, has extensive international experience, providing expertise and consulting services for companies particularly in the natural resources sector within Russia and the former Soviet Union, since 1988. He was formerly Founder, CEO and Chairman of Occupational Urgent Care Systems Inc., a company traded on the NASDAQ National Market System until it was sold in 1992.

External Appointments
Mr Cameron is CEO and Chairman of Cameron and Associates

- A** Audit Committee
- N** Nominations Committee
- R** Remuneration Committee
- S** Safety, Sustainability and Workforce Committee
- E** Executive Committee
- Chair of Committee



A
N
R
S

Mr Damien Hackett
Independent Non-Executive Director

Nationality: British and Australian
Appointed: October 2018

Experience

Mr Hackett has 26 years critical investment research experience covering globally diverse mining companies, initially as Global Head of Mining Research with Credit Suisse – First Boston in Australia, following which he held similar roles with Credit Suisse and Canaccord Genuity in London. Latterly he was Vice Chairman Mining Advisory at Canaccord Genuity responsible for developing investment themes in metals and mining across North America, Europe, Russia and Australia.

Mr Hackett's early career in resources was grounded in 4 years of exploration, resource development and mining in Western Australia followed by 7 years in mineral exploration and economic assessment in Saudi Arabia. Mr Hackett holds a Bachelor of Science from the Australian National University in Canberra.

External Appointments

Mr Hackett is Chairman of UrAmerica Ltd, a private uranium exploration company in Argentina.



A
R
N

Mr Robert Jenkins
Independent Non-Executive Director

Nationality: British
Appointed: June 2018

Experience

Mr Jenkins is a Chartered Accountant, has an MA in Modern History and Modern Languages from Oxford University, and is a fluent Russian speaker. He has 25 years of Russia-related investment and natural resources experience. Mr Jenkins was formerly Finance Director of AIM listed Eurasia Mining PLC, a Russia-focused mining exploration company, and Chief Financial Officer of Urals Energy, a Russia-based oil exploration and production company. He was formerly Senior Independent Director and Audit Committee Chairman of Ruspetro Plc, a Russia-focused independent oil and gas production company, and Audit Committee Chairman of Toledo Mining Corporation PLC, which is engaged in nickel ore production in the Philippines.

External Appointments

Mr Jenkins is also currently a Non-Executive Director of Brazilian Nickel PLC and of Oppenheimer Resources, a Luxembourg-registered investment vehicle engaged in financing oil and gas producers in the US.



A
R

Ms Charlotte Philipps
Independent Non-Executive Director

Nationality: German
Appointed: November 2019

Experience

Ms Philipps has extensive experience in corporate financing and equity transactions in Russia and in other transitional former Soviet and CMEA countries, principally focused on natural resources.

Ms Philipps, a German national and qualified lawyer, relocated to London in 1993 to join the European Bank for Reconstruction and Development (EBRD) in London, where she held a number of senior positions, latterly as Senior Banker for EBRD's Natural Resources Team, before accepting the appointment of President & CEO of AIG Russia Century Fund, Moscow. Ms Philipps lived and worked in Moscow during the period 2006 to 2014. Ms Philipps speaks a number of languages, including Russian.

External Appointments

Ms Philipps is a member of the Strategy and Investment Committee of Inter RAO UES, Russia's largest integrated utility company. In addition, she is a member of the Advisory Board of CAPTIS Intelligence Inc., a US-based global industry leader in security and crime prevention and chairs the Board of one of the UK's largest architecture firms.



R
S

Mrs Katia Ray
Independent Non-Executive Director

Nationality: British and Russian
Appointed: November 2019

Experience

Mrs Ray has a scientific and technical background and over 25 years' experience in the mining sector in senior leadership roles with both Rio Tinto plc and Anglo American plc, primarily in business development, sales and marketing, and project and change management. She has worked across the globe in a number of different commodities including industrial minerals, diamonds and platinum group metals. Mrs Ray founded and runs a management consulting firm and has advised corporate mining companies on corporate strategy across the value chain, private equity groups on M&A projects and a number of start-up businesses.

Mrs Ray has a MSc in Chemical Engineering from the Mendeleev University of Chemical Technology in Moscow, Russia. Mrs Ray was born in Russia but has lived in the UK since the early 1990s and is a British citizen.

External Appointments

Mrs Ray has a number of voluntary roles, including acting as a Governor and a Nominations Committee member at the Royal Surrey County Hospital NHS Trust and is a Business Advisor for Young Enterprise UK.

Board of Directors continued



Mr Danila Kotlyarov
*Executive Director &
Chief Financial Officer*

Nationality: Russian
Appointed: April 2020

Experience

Immediately prior to joining the Company, Mr Kotlyarov was Chief Financial Officer and Executive Director of IRC Limited, a position he had held since January 2016. Prior to this he served as Deputy General Director for Finance of Aricom a position which in 2010 transferred to IRC as Deputy Chief Executive Officer, following the listing of IRC on the Hong Kong Stock Exchange. Mr Kotlyarov was appointed as Interim Chief Financial Officer of IRC in March 2015.

Mr Kotlyarov has considerable experience having been employed in various position with a number of international companies.

Mr Kotlyarov holds a BA in Management from Moscow State University and a MA in International Economics from the Moscow State Institute of International Relations (MGIMO). He is a fellow member of the Association of Chartered Certified Accountants (ACCA), Chartered Financial Analyst (CFA) charter holder, member of Hong Kong and Russia Associations of Financial Analysts and has a professional diploma in civil and industrial construction.

External Appointments

Non-Executive Director, IRC Limited.



Mr Maxim Kharin
Non-Executive Director

Nationality: Russian
Appointed: April 2020

Experience

Mr Kharin has a degree in Computer-aided Systems of Management from the Far Eastern State Technical University of Russia and became a qualified accountant in 2006. Prior to joining Uzhuralzoloto Group of Companies ("UGC") as CFO, Mr Kharin held several roles in the International Audit Department at Moore Stephens where he held the title of Senior Auditor and Director and was responsible for the independent audit of companies across a range of sectors, including mining, with a particular focus on the transformation of Russian Accounting Standards to IFRS.

Mr Kharin was nominated as a Director of Petropavlovsk by UGC, the Company's largest shareholder.

External Appointments

Mr Kharin currently serves as the Director for Economics and Finance at UGC a role he has held since 2012, and where he has also served as Chairman of its Board since 2018.

Executive Committee

The Company's Executive Committee was reconstituted on 1 January 2019, and comprises a focused and experienced senior executive team who manage the Group on a day-to-day basis. Terms of Reference of the Executive Committee are available on the Company's website at www.petrodavlovsk.net.

The Executive Committee comprises Board members, Dr Pavel Maslovskiy and Mr Danila Kotlyarov, along with the following:



Dr Alya Samokhvalova
Deputy CEO

Dr Alfiya (Alya) Samokhvalova is Deputy Chief Executive Officer and a Member of the Safety, Sustainability and Workforce Committee of the Board of Directors. In addition, Dr Samokhvalova is Head of the Company's Corporate Office. Dr Samokhvalova joined the Company in 2002.

Dr Samokhvalova is also a Non-Executive Director of the Russo-British Chamber of Commerce and a member of the Global Advisory Board of Cass Business School.

Dr Samokhvalova holds a Masters in Investment Management from Cass Business School, London, and a PhD in Economics from the Moscow International High Business School, a BSc in Accounting and Audit (All-Russian Distance Institute of Finance and Economics, Moscow) and a BSc in Pharmacy (Alma-Ata State Medical University). She also holds a Professional Accountant Certificate from the Institute of Professional Accountants of Russia.



Mr Sergey Ermolenko
General Director MC
Petrodavlovsk

Mr Sergey Ermolenko is the General Director of Management Company Petrodavlovsk. Mr Ermolenko served as a Director and as Interim Chief Executive Officer of Petrodavlovsk PLC from 18 July 2017 until 16 April 2018. He previously served in this role from December 2011 to November 2014 when Dr Pavel Maslovskiy was serving as a Russian senator.

Mr Ermolenko is one of the original members of the Group's founding management team. He has held top managerial positions with the Group since its inception in 1994 and has been instrumental in the expansion of the Group into a multi-mine operation, overseeing the commissioning of Pokrovskiy, Pioneer, Malomir and Albyn.

He was appointed General Director of Management Company Petrodavlovsk in 2004. In this capacity, he led the expansion of the Group into a multi mine operator.



Mr Nikolai Vlasov
Group Chief Geologist

Mr Nikolai Vlasov has many years of experience in gold exploration and mining within the Amur region.

Mr Vlasov was one of the original members of the Company's founding management. Prior to this he was the chief geologist of the only comprehensive geological exploration expedition in the Amur region. Mr Vlasov also headed the government department for the evaluation of gold resources in the Russian Far East.

In his role of Group Chief Geologist, Mr Vlasov leads the Group's exploration work.

Mr Vlasov has received various state awards including for excellence in exploration of mineral resources, Honored Prospector of mineral resources and Honored Geologist of the Russian Federation.



Mr Dmitrii Chekashkin
Group Executive, Business
Transformation and
Operational Efficiency

Mr Dmitrii Chekashkin was appointed as Group Executive, Business Transformation and Operational Efficiency in October 2019. He is also the Group's Chief Risk Officer and a member of the Company's Executive Committee.

Mr Chekashkin has more than 25 years of experience in the gold mining industry. Mr Chekashkin joined the Group in 2003. He has held various senior positions, including Group Head of Precious Metals and Chief Operating Officer. He was appointed as a Director and COO of the Company in May 2013 and resigned as a Director in March 2015 when the number of Directors on the Board was reduced. Mr Chekashkin left the Group in October 2018 for a sabbatical, returning to his new position in October 2019.

Prior to his employment with the Group he was employed as Deputy General Director of Finance for two leading gold mining enterprises in the Russian Far East.

Mr Chekashkin is a qualified engineer.



Mr Mikhail Safray
Senior Legal Advisor

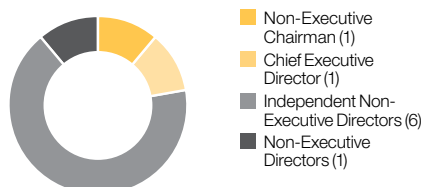
Mr Mikhail Safray joined the Petrodavlovsk Group in August 2018 and was appointed as Senior Legal Advisor in November 2018.

Prior to joining the Company, Mr Safray held a number of senior legal positions with large Russian and international companies, including his tenure at Alfa Group, Immofinanz AG and Interros. He also acted as legal counsel for the European Bank for Reconstruction and Development in London where he was responsible for investments in industrial companies in the CIS countries and the Balkans.

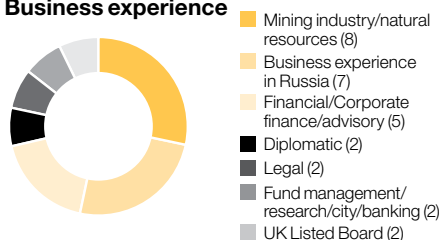
Mr Safray graduated from the National Research University Higher School of Economics, summa cum laude, and received a PhD degree from the Kutafin Moscow State Law University and LL.M from Boston University.

As at 31 December 2019

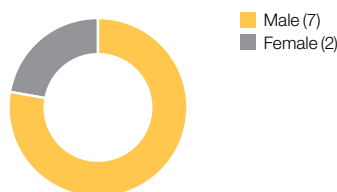
Board balance of Directors



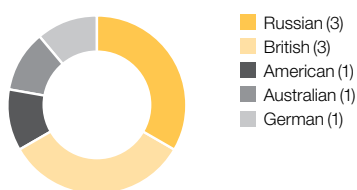
Business experience



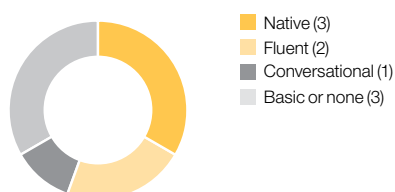
Gender Diversity



Nationality



Language skills – Russian



Language skills – English



Diversity in the Board

Petropavlovsk has an effective board of directors made up of diverse and experienced members. During 2019, the Board achieved its goal of improving its gender and age diversity. Our two new Directors have further strengthened our Board, bringing complementary skills and international expertise across diverse backgrounds in natural resources, finance and governance.

As at 31 December 2019, the nine-member Board comprised nationals of five different countries (the UK, Russia, the USA, Australia and Germany), with 22% of our Board comprising female directors.

Corporate governance framework

The following sections of this report detail the work and operation of the Board, and the corporate governance framework within which the Company operates, including further reporting required under the 2018 Code, the UK Listing Rules and the Disclosure Guidance & Transparency Rules, to all of which the Company is subject.

Application of the UK Corporate Governance Code

For the year commencing 1 January 2019, the Company was subject to the '2018 Code' This can be viewed on the website of the Financial Reporting Council at www.frc.org.uk.

The 2018 Code sets out key corporate governance recommendations for companies such as Petropavlovsk that have a premium listing of their equity shares on the main market of the London Stock Exchange. It consists of broad principles (Principles) and specific provisions (Provisions) of good governance in the following areas: Board Leadership and Company Purpose; Division of Responsibilities; Composition, Succession and Evaluation; Audit, Risk and Internal Control and Remuneration.

This Governance Report together with the Audit Committee Report (on pages 146 to 154), the Directors' Remuneration Report (on pages 156 to 174) and the Nominations Committee Report (on pages 144 to 145) is arranged around these Principles and sets out how the Company has applied the Principles and Provisions of the 2018 Code during 2019.

Compliance with Code Provisions

The Company has complied with the Provisions of the Code throughout the year ended 31 December 2019, with the following exceptions:

Independence of Directors: Provision 9 and 10 of Part 2. The 2018 Code requires that the Board should state its reasons for determining that a director is independent notwithstanding the existence of relationships or circumstances which may appear relevant to its determination.

Sir Roderic Lyne and Mr Robert Jenkins were appointed as Directors of the Company at its 2018 Annual General Meeting, having been proposed for appointment by two of the Company's major shareholders, together having, at that time, an interest in c.9% of the Company's voting rights over its ordinary shares. Sir Roderic and Mr Jenkins were re-elected as Directors by shareholders at the Company's 2019 Annual General Meeting having been proposed for re-election by the Board.

Sir Roderic Lyne and Mr Jenkins are independent and are responsible to, and act in the interests of all shareholders equally.

Sir Roderic Lyne previously served as a Director of Aricom Limited, from 2 October 2006 until 22 April 2009 and as a Director of Petropavlovsk PLC, following Aricom's merger with Petropavlovsk, from 22 April 2009 until he retired from the Board on 28 June 2016. The Board considers that, given Sir Roderic has no connection with any major shareholder, and that he had retired as a Director two years prior to his appointment as Chairman, having had no involvement with the Company or its operations during this time, (except in his capacity as a small shareholder up to mid-2017), he was independent upon his appointment as Chairman.

Mr Robert Jenkins was previously a Director of the Company for the period from 30 April 2015 to 22 June 2017. Given that Mr Jenkins has no connection with any major shareholder and that he was previously a Director of the Company for a period of only just over 2 years, he is considered by the Company, and by the terms of the 2018 Code, as being an Independent Director.

Senior Independent Director: Provision 12 of Part 2 of the Code, requires that the Board should appoint one of the independent non-executive directors to be the senior independent director. Following the Company's 2018 Annual General Meeting the Directors agreed that until the Board was fully constituted it was not appropriate to appoint a Senior Independent Director. Following the constitution of the new Board and the recommendation of the Nominations Committee, Mr Harry Kenyon-Slaney was appointed as Senior Independent Director with effect from 23 April 2019.

The Board

The role of the Board

The Board is ultimately responsible to shareholders for the direction, management, performance and long-term sustainable success of the Company. It sets the Group's strategy and objectives and oversees and monitors internal controls, risk management, principal risks, governance and viability of the Company. In doing so, the Directors comply with their duties under section 172 of the Companies Act 2006.

The Board has established certain principal committees to assist it in fulfilling its oversight responsibilities, providing dedicated focus on particular areas, as set out below. The Chairs of the Audit, Remuneration, Nominations and Safety, Sustainability & Workforce Committees report to the Board on the Committee's activities after each Committee meeting, highlighting the proceedings of those meetings, including the key discussion points and any areas of concern.

In March 2020, after consideration of the Group's risk framework the Board constituted a Risk Committee, chaired by Mr Damien Hackett, Independent Non-Executive Director. The principal role of the Risk Committee is to advise the Board on the Company's overall risk appetite, tolerance and strategy and oversee and advise the Board on current risk exposures of the Company and future risk strategy ensuring that appropriate mitigating strategies are in place to manage these risks.

Terms of Reference of the Board Committees are available on the Company's website at www.petrovsk.net.

Board structure – as at 31 December 2019

Board

Board Committees

Audit Committee

- Reviews Audit Report on the interim review and full year audit;
- Reviews appropriateness of accounting standards;
- Oversees relationships with internal and external auditors;
- Oversees external audit process;
- Reviews the financial risks; and
- Reviews internal audit plans.

Membership

Robert Jenkins (Chair)
James W Cameron Jr
Damien Hackett
Charlotte Philipps
Harry Kenyon-Slaney

See pages [146](#) to [154](#) for more information.

Remuneration Committee

- Determines and agrees with the Board the format and broad policy for the remuneration of the Company Chairman, Executive Directors, members of the Executive Committee and the Company Secretary;
- Reviews the on-going appropriateness of the policy;
- Ensures that the Company maintains contact with shareholders regarding the Company's remuneration policy; and
- Receives and considers details of Workforce remuneration.

Membership

Robert Jenkins (Chair)
James W Cameron Jr
Damien Hackett
Charlotte Philipps
Katia Ray

See pages [156](#) to [174](#) for more information.

Nominations Committee

- Reviews structure, size and composition of the Board and its Committees and makes recommendations to the Board as appropriate;
- Considers succession planning issues for Directors and senior executives; and
- Evaluates the skills and experience of the Board before any appointment is made to the Board.

Membership

Sir Roderic Lyne (Chair)
Robert Jenkins
Damien Hackett
Harry Kenyon-Slaney
Dr Pavel Maslovskiy

See pages [144](#) to [145](#) for more information.

Safety, Sustainability & Workforce Committee

- Reviews the Group's health, safety, environmental and community relations ("Sustainability") strategy;
- Evaluates the effectiveness of the Group's policies and systems for managing Sustainability issues and risks;
- Assesses the performance of the Group with regard to the impact of Sustainability decisions and actions; and
- Seeks active engagement with the Group's workforce on behalf of the Board.

Membership

Harry Kenyon-Slaney (Chair)
Damien Hackett
Dr Pavel Maslovskiy
Katia Ray
Dr Alya Samokhvalova

Please see pages [86](#) to [123](#).

Governance Report continued

2019 Board composition, meeting attendance and responsibilities

The following table details responsibilities and independence of the Directors, detailing their attendance at Board meetings during the year and how their responsibilities are linked to remuneration.

	Meetings attended	Maximum possible	Independent	Responsibilities	Linked to remuneration
Chairman					
Sir Roderic Lyne	6	6	✓	Providing leadership to the Board. Promoting the strategic success of the Company and creating value for the shareholders in the long-term, whilst ensuring that sound, effective corporate governance practices are embedded in the Group and in its decision-making processes.	
Executive Director					
Dr Pavel Maslovskiy	6	6		Strategy and Group performance – responsibility for developing the Group's objectives and strategy and for the successful achievement of objectives and execution of strategy, following approval by the Board.	✓
Senior Independent Director					
Harry Kenyon-Slaney	6	6	✓	To support the Chairman and provide an independent point of contact to shareholders on Board matters.	

*The responsibilities of the Non-Executive Chairman, Chief Executive Officer and the Senior Independent Director are clearly defined with separated responsibilities, set out in writing and approved by the Board.
A copy of this document is available on the Company's website at www.petropavlovsk.net.*

Independent Non-Executive Directors					
James W. Cameron Jr¹	5	6	✓		
Damien Hackett	6	6	✓		
Robert Jenkins	6	6	✓	The Independent Non-Executive Directors bring independent and objective analysis to all matters before the Board and its Committees using their substantial and wide-ranging experience.	
Charlotte Philipps <i>(appointed on 8 November 2019)</i>	1	1	✓		
Katia Ray <i>(appointed on 8 November 2019)</i>	1	1	✓	They monitor the executives' delivery of strategy within the risk and governance structure agreed by the Board.	

As at 31 December 2019 66.7% of the Board comprised of Independent Non-Executive Directors.

Non-Executive Directors					
Mirzaaziz Musakhanov² <i>(appointed on 14 October 2019, resigned on 5 February 2020)</i>	2	2	x	Mr Musakhanov was a nominee Director of Aeon Mining Limited, the Company's former largest shareholder.	
Bektas Mukazhanov² <i>(retired as a Director on 31 July 2019)</i>	3	3	x	Mr Mukazhanov was a nominee Director of Fincraft Holdings Ltd, the Company's former largest shareholder.	

As at 31 December 2019, c.22% of the Directors were female.

The Board comprises Directors of 5 nationalities.

Members of the Board have a wide range of appropriate backgrounds and experience.

1) Mr Cameron was unable to attend the meeting on 23 April 2019 due to illness.

2) Save for the potential conflicts inherent in their relationship as nominee Directors, there were no potential conflicts of interest between the duties owed to the Company by Messrs Musakhanov and Mukazhanov and their private interests or other duties.

Board meetings held in 2019

The Board held six scheduled meetings during the year, and individual attendance is set out above. The Directors also attended a separate Board Strategy meeting in October, at which all Directors were present. In addition, there were ad hoc meetings convened to consider matters relating to the guarantee to be provided to Gazprombank Joint Stock Company in relation to IRC's new debt facilities, the refinancing of the Group's 9% Convertible Bonds due 2020, the approval of the option to acquire the remaining 25% of TEMI LLC and matters of a routine or administrative nature.

All members of the Board attended a site visit to the Group's mining operations in April 2019 which included a visit to IRC's K&S facility.

Sufficient time is provided, periodically, for the Chairman to meet privately with the Senior Independent Director and the Non-Executive Directors to discuss any matters.

Board effectiveness

Board activities during 2019

The Board has a schedule of matters reserved for its decision. This includes inter alia: strategic matters, financial reporting and controls, legal and regulatory compliance and

appointments of committees and setting of their terms of reference. A copy of the Schedule of Matters Reserved for the Board is available on the Company's website at www.petropavlovsk.net.

During the year, the Board focused on the matters summarised in the table below in line with the Group strategy and the Group's principal risks.

Key area of activity	Matters considered	Outcome	Stakeholders
Strategic:			
Strategy	<ul style="list-style-type: none"> – Development of the Group's strategy – The Long-Term Plan – Options available for the future of the Group's 31.1% shareholding in IRC 	<p>The Board considered:</p> <ul style="list-style-type: none"> – Petropavlovsk's strategy & culture; – The Group's Long-Term Plan; and – The investment in IRC, which is considered as a non-core asset of the Group. The Board continues to consider its options, specifically in respect of the removal of the guarantee provided to Gazprombank by the Company in respect of K&S's, a subsidiary of IRC, finance facilities. 	<ul style="list-style-type: none"> – Our investors – Our employees – Our communities – Our contractors
Continuously improve Health, Safety & Environmental Standards	<ul style="list-style-type: none"> – Proposed Environmental, Social & Governance ('ESG') programme 	<p>The Board approved the Company's joining the United Nations (UN) Global Compact initiative in December 2019. This is a voluntary leadership platform which reflects the Board's commitment to aligning the Group's operations with ten universally accepted principles in the areas of human rights, labour, environment and anti-corruption.</p> <p>The Board reviewed the Group's ESG strategy and, considering this to be of a critical importance to the Group's future, the Board agreed to appoint a Head of Sustainable Business to develop the Group's ESG programme and set appropriate ESG KPIs targets.</p>	<ul style="list-style-type: none"> – Our employees – Our communities and governments – Our investors – Our contractors
	<ul style="list-style-type: none"> – Lost-Time Injury Frequency Rate & initiatives to improve safety performance 	<p>The Safety, Sustainability & Workforce Committee (the "SS&W Committee") advised the Board of the H&S initiatives being undertaken at operational level to improve LTIFR. 2019 saw a considerable improvement in LTIFR from 2.52 to 1.61.</p>	
	<ul style="list-style-type: none"> – The safety of the Group's Hydrotechnical Storage Facilities 	<p>The SS&W Committee Chair reported on a detailed paper presented by the executive team on management's approach to ensuring that the Group's Hydrotechnical Storage Facilities ("HSF") are operated and monitored in accordance with legislation of the Russian Federation and in line with international best practices. This approach adopts the zero-harm principle.</p>	

Governance Report continued

Key area of activity	Matters considered	Outcome	Stakeholders
Strategic: (continued)			
Strengthen the balance sheet and increase liquidity	– The guarantee provided to Gazprombank in relation to IRC’s loan facilities and the refinancing of its bank debt	In March 2019, IRC completed a refinancing of its ICBC Facility with Gazprombank, extending the maturity of the debt obligations. The refinancing terms included proposed new guarantee arrangements, which the Board considered, and on its recommendation, were approved by shareholders on 12 March 2019. The refinancing and new guarantee arrangements have assisted to de-risk the Company’s financial position, enabling also K&S, a wholly owned subsidiary of IRC, to repay bridge loans amounting to US\$57 million advanced by the Company.	– All stakeholders
	– Refinancing of the Petropavlovsk 2010 Limited 9% Convertible Bonds due March 2020	In June 2019, the Board approved the launch of the Group’s US\$125 million 8.25% Convertible Bonds due 2024, proceeds of which were used to repay the existing US\$100 million Group’s 9% Convertible Bonds due 2020 and to accelerate the construction of the planned new flotation facility at the Pioneer mine.	– All stakeholders
<i>In August 2019, Fitch Ratings upgraded the Group’s Long-Term Issuer Default Rating and senior unsecured rating to ‘B-’ From ‘CCC’ with a Positive Outlook due to “a significant strengthening in Petropavlovsk’s liquidity position due to the refinancing of the convertible bond, repayment of US\$57 million bridge loans by affiliated iron ore producer IRC Limited and the increased visibility for production due to the launch of the POX Hub in November 2018.”</i>			
Maintain and expand gold resources	– Option Agreement to acquire 25% minority interest in TEMI LLC.	The Board approved an Option to acquire the remaining 25% of TEMI LLC (“TEMI”) the terms of which were announced on 23 September 2019. TEMI holds the licences to the Elginskoye and Unglichikanskoye deposits, which have substantial non-refractory gold reserves and resources, suitable for processing at the Albyn Plant.	– Our investors – Our employees
	– Development Opportunities	At the Board Strategy Day in October 2019, the Board considered various development opportunities for Petropavlovsk’s resource base. Assessment of these options is continuing, led by the Executive Committee.	
Unlock the value creation potential of the POX Hub	– Ramp-up of POX Hub production, including purchase of third-party concentrate	The Board: – Received regular updates on the ramping up of the POX Hub’s production; as well as on the supply and processing of third-party concentrate; and – Considered a report on the comprehensive systems and security in place to protect the POX processing plant which aims to ensure environmental safety and safety of the Group’s employees.	– Our investors – Our employees – Our suppliers – Our community (the environment)
	– Acceleration of the construction of the Pioneer flotation plant	The Board approved the acceleration of the construction of the Pioneer flotation plant. Construction remains on schedule for the plant to be fully operational in Q4 2020.	
Development of current and future employees	– Employee engagement	In April 2019 the full Board visited the Group’s operations and met with members of the workforce and the local trade union. Please go to page 100 relating to the Company’s culture and its engagement with employees.	– Our employees

Key area of activity	Matters considered	Outcome	Stakeholders
Governance & Legal:			
Leadership	– Appointment of additional Board members to broaden the skills and experience of the Board and to enhance the diversity of the Group's leadership	<p>During the year Charlotte Philipps and Katia Ray joined the Board as Independent Non-Executive Directors bringing complementary skills and international expertise across diverse backgrounds in natural resources, finance and governance.</p> <p>The biographies of all current Board and Executive Committee members are set out on pages 130 to 133.</p>	
Board evaluation	– External Board evaluation	The Board undertook an external Board evaluation, conducted by Prism CoSec an independent firm with no other connection to the Company. Further details are provided on page 134 .	– Our Board colleagues
Legal & Regulatory	– Regulatory	The Board approved the Modern Slavery Statement, Payments to Governments Report, updated Anti-Bribery Policy and 'Speak Up' Policy.	<ul style="list-style-type: none"> – Our employees – Our suppliers – Our customers – Governments
Shareholder engagement			
Annual General Meeting	– Poll results of resolutions proposed at the 2019 Annual General Meeting	The Board consulted with shareholders who voted against resolutions to ascertain their reasons for voting against the Board's recommendation. Further information is provided on page 175 .	– Our shareholders
Investor engagement	– Shareholder feedback	The Board received and considered feedback from shareholders.	– Our shareholders
Financial Updates & Risk Management			
Finance	– Actual results and budgeting	<p>The Board considered and approved the Group's 2020 Budget and updated Long-Term Plan.</p> <p>The Board reviewed the Group's cash flow projections and hedging arrangements, including its forward gold sales arrangements.</p>	
Internal Controls	– Risk Management	<p>The Board instigated a review of the Group's Risk Framework with recommendations presented to the Board in early 2020. As a result, the Board agreed:</p> <ul style="list-style-type: none"> – A Board Risk Committee to be set up and chaired by Mr Damien Hackett, Independent Non-Executive Director; and – A new Risk Committee framework will be presented to the Board in May 2020. 	
Production & Operational Updates			
	– Monthly production figures and operational issues	<p>The Board reviewed the Group's monthly production reports compared to budget and forecast.</p> <p>It also received updates on operational issues, including flooding at Malomir during July and August 2019.</p>	

Board evaluation

During the second half of 2019, a performance evaluation of the Board was externally facilitated by Christopher Stamp of Prism CoSec ('Prism'). Neither Mr Stamp nor Prism has any other connection with the Company.

Process: The scope of the 2019 evaluation was determined following a review by Prism of Board and Committee papers, minutes and Committee terms of reference. The scope was discussed in advance with the Senior Independent Director and the Company Secretary. The process agreed on was to use one-to-one interviews with each of the Directors, the Chief Financial Officer, the Deputy Chief Executive Officer and the Company Secretary. A report was then prepared by the external consultant incorporating the findings and observations (the 'Report'). The Report was discussed with the Senior Independent Director and the Company Secretary prior to circulation to members of the Board. The recommendations were discussed at the following Board meeting. The conclusion of that discussion and agreed actions were recorded in the minutes of the meeting.

With a significant period of change nearly completed, opening up the possibilities for the Board to be more forward-looking, the evaluation provided a good opportunity for the Board to consider how to progress its governance processes further, particularly taking into account the expectations set by the 2018 Code. The principal focus of the evaluation was therefore on:

- Board and Committee processes, papers, minutes and structure of meetings;
- Board and Committee priorities for the coming 12-18 months;
- Adoption of the new UK Corporate Governance Code requirements; and
- Governance of stakeholder relationships.

In addition, the independent consultant briefed the Senior Independent Director on feedback relating to Sir Roderic Lyne which was used as part of the evaluation of the Chairman, as required by the 2018 Code.

Board Review Insights: The evaluation concluded that the Board had developed into a cohesive group. The Independent Non-Executive Directors brought robust challenge to the Board's discussions whilst respecting the need for the executive team to be allowed to manage the Group's business operations. Relationships with the Company's major shareholders had improved with the Chairman and Senior Independent Director supporting the interaction of the executive team.

The Board was reasonably satisfied with the current approach to risk believing it to be robust and balanced. However, the Board's approach to risk was evolving and there might be scope for further improvement in the approach to risk particularly the operation and effectiveness of the overall risk management framework.

Other areas for further progress included consistency and structure of papers and management information. In addition, whilst there are no immediate concerns about succession planning at the executive level, the report concluded that there is scope for the Nominations Committee to focus on senior management succession to ensure that loss of personnel risk is managed well.

Induction, site visits, information and support

Induction and site visits: New directors receive appropriate induction training when they join the board of Petropavlovsk PLC. Directors are expected to update their skills and knowledge and develop the familiarity with the Group's operations needed to fulfil their role on both the Board and any Committees.

As part of their induction, Ms Philipps and Mrs Ray met with members of the Senior Executive team, including with Dr Pavel Maslovskiy, Chief Executive Officer; Dr Alya Samokhvalova, Deputy Chief Executive Officer and Mr Dmitrii Chekashkin, Group Executive, Business Transformation and Operational Efficiency.

Action Plan: The following action points, amongst others, were agreed as a result of the Board evaluation process

Information and processes:	A review of papers and information provided to the Board and Board Committees should be undertaken to ensure that the papers focus on key issues.	Status: This review is underway
Succession planning:	Succession planning for the team below the Board will be included as an item for future Nominations Committee meetings.	Status: Ongoing
Risk management and internal control:	A review of the Group's risk management framework and internal control environment should be undertaken.	Status: Reviews of the Group's finance function and its internal audit function have been completed. In addition, following an internal review of the Group's risk framework, the Board has constituted a Risk Committee, chaired by Mr Damien Hackett, Independent Non-Executive Director.

As new members of the Remuneration Committee, and as part of their induction, they also met with Mercer Kepler, adviser to this Committee. They both attended a briefing session with management on financial control and reporting matters. This was of particular relevance to Ms Philipps due to her appointment to the Audit Committee.

Visits to the Group's gold mining operations are an important part of a Director's induction and a visit has been planned for Ms Philipps and Mrs Ray during the latter half of 2020.

The full Board visited the Group's gold mining operations in early April 2019. The Directors visited the Group's offices in Blagoveschensk, the Malomir mine and the POX Hub at Pokrovskiy. A visit to IRC's K&S facility was also arranged. During the visit the Chairman of the Safety, Sustainability & Workforce Committee, and members of this Committee, met with representatives of the workforce. Management presentations were arranged for the Board including from Mr Nikolai Vlasov, Group Chief Geologist.

As detailed in the Audit Committee Report on [page 147](#), Mr Jenkins, Audit Committee Chair, visited the Group's mining operations in December 2019, together with the Company's external auditor, Deloitte LLP. This included visits to the Albyn, Malomir and Pioneer mines, the flotation concentrate plant at Malomir and the POX Hub facility. Mr Jenkins has also attended the Group's offices in Moscow for meetings with the Chief Financial Officer and Group Internal Auditor and with certain audit firms who participated in the Company's audit tender.

During the year the Board received presentations from the Company's brokers advising them of their responsibilities as Directors of a listed company and from the Company's legal counsel on the UK Listing Rules including the new obligations in respect of related party transactions.

The Non-Executive Directors may attend conferences and seminars on the mining industry at the Company's expense to enhance and update their knowledge. The Directors receive briefings on regulatory and corporate governance issues from the Company Secretary and the Company's advisors.

Information flow: Prior to each Board meeting the Directors receive detailed information on operational and financial performance, activities of the Board Committees, investor relations and projects that are being progressed by the Executive team. The Board receives presentations and verbal updates from the Chief Executive Officer, Chief Financial Officer and other members of the Executive Committee at Board meetings as appropriate. All Directors are encouraged to make further enquiries, and request further information as they feel appropriate, of the Chief Executive Officer or members of the senior executive team. All Directors are encouraged to participate actively in Board meetings which are chaired in an open and collaborative manner.

All Directors have access to the services of a professionally-qualified and experienced Company Secretary, who is responsible for information flows to the Board and its committees and between senior management, the Chairman and Non-Executive Directors, facilitating induction and assisting with professional development as required, ensuring compliance with Board procedure and applicable laws and regulation.

Professional advice: There is an agreed procedure for Directors to take independent professional advice if considered necessary to discharge their responsibilities as Directors and at the Company's expense.

Senior Advisor and President: Mr Peter Hambro, who co-founded the Company with Dr Maslovskiy, is President of the Company and Senior Advisor to the Board. Mr Hambro is not a member of the Company's management or executive team and has no authority to take executive decisions. Mr Hambro is also Non-Executive Chairman of IRC Limited.

Investor engagement

Communication with shareholders is of great importance to the Company and the Board aims to maintain an open and transparent dialogue with its shareholders and potential shareholders. The Investor Relations department manages the interaction with these audiences and ensures that full and comprehensive information is available to all shareholders.

There is regular dialogue with institutional shareholders, as well as presentations after the full year and interim results. The Board is advised of any specific comments from institutional investors to enable it to develop an understanding of the views of major shareholders. Small retail shareholders are important to the Company. All shareholders have the opportunity to put questions at the Company's Annual General Meetings. In addition, shareholders are welcome to contact the Company's Investor Relations department with any specific queries regarding the Company.

2019 Annual General Meeting

The following table details the resolutions proposed at the 2019 AGM by the Company which received less than 80% of votes in favour:

Resolutions:	'For'	'Against'
8 Election of Mr Bektas Mukazhanov	74.75%	25.25%
9 Re-election of Sir Roderic Lyne	71.60%	28.40%
11 Re-election of Mr Robert Jenkins	74.69%	25.31%
12 Authority to allot shares	73.51%	26.49%
13 Disapplication of pre-emption rights*	73.43%	26.57%
14 Disapplication of pre-emption rights (additional 5%)*	73.38%	26.62%

*Proposed as Special Resolutions requiring at least 75% of votes cast to be in favour of the Resolution.

The following information is provided in accordance with Provision 4 of the Code:

As detailed in the Company's announcements on 5 December 2019, the Chairman personally wrote to shareholders who voted against the above resolutions to understand why they had voted against the Board's recommendation. The Chairman and the Senior Independent Director had constructive meetings with two of the shareholder groups who accepted the invitation to discuss the resolutions. Mr Jenkins also discussed matters with certain shareholders in his capacity as both Remuneration and Audit Committee Chair.

During this consultation process the following points were raised:

Re-election of Directors:

- Re-election of Sir Roderic Lyne (Resolution 9): Sir Roderic is Chair of the Board and of the Nominations Committee. Shareholders highlighted their concerns about the diversity of the Board given that at the date of the 2019 AGM all the Directors were male.

As detailed in the 2018 Nominations Committee Report the aim of the Board was to identify and recruit both female and younger Directors with relevant qualifications. Following an extensive search, the Company announced the appointment of Ms Charlotte Philipps and Mrs Katia Ray as Independent Directors of the Company with effect from 8 November 2019.

As at 31 December 2019, the Board's composition had c.22% female representation, closely matching the overall female representation across all Petropavlovsk operations of c.25% – notably higher than the International Women in Mining's industry estimate of 10 percent females in mining operations globally. The age profile of the Board has also improved. More information is provided on page [144](#) to [145](#).

- Re-election of Mr Robert Jenkins (Resolution 11): Mr Jenkins is Chair of the Remuneration and Audit Committees. The Company's audit tender was due during the year ended 31 December 2019. However due to Board changes the Company requested an extension from the Financial Reporting Council. This was duly provided. However certain of our shareholders decided, due to their internal voting policies, to vote against Mr Jenkins re-election due to this deferral of the audit tender. An audit tender process was undertaken in late 2019 which is explained in detail on [page 153](#). As a consequence, PwC will be appointed as the Company's auditor following the signing of the Company's accounts and financial statements for the year ended 31 December 2019.

In addition, certain shareholders raised concerns regarding the level of disclosure of bonus targets in the 2018 Directors' Remuneration Report. As a consequence of this feedback, the level of disclosure in the 2019 Directors' Remuneration Report has been increased.

- With respect to Resolution 8, the election of Mr Bektas Mukazhanov as a Director, Mr Mukazhanov, nominee Director of Fincraft Holdings Ltd the then major shareholder of the Company, resigned as a Non-Executive Director of the Company on 30 July 2019 following a purchase of Fincraft Holdings Ltd by Aeon Mining Limited.

Authority to Allot Shares and Dis-apply Pre-Emption Rights: In respect of Resolutions 13 and 14 relating to the application of disapplication rights, the authority sought by the Company was aligned with the Investment Association's share capital guidelines and market practice for FTSE listed companies. However, these Special Resolutions, which required at least 75% support from shareholders who voted, were not approved.

It can be noted that during the Chairman's consultation process no shareholder raised any specific concerns regarding the authority to allot shares and the two special resolutions to dis-apply pre-emption rights. Shareholders were supportive of resolutions to allot shares and dis-apply pre-emption rights proposed at the 2018 AGM.

The Board appreciated the feedback it received from shareholders during this process. The Board intends to continue its policy of proactive engagement with its shareholders.



Nominations Committee Report

Letter from the Nominations Committee Chair

Nominations Committee composition and meeting attendance

Current members	Role	Meeting attendance
Sir Roderic Lyne (Chairman)	Non-Executive Chairman of the Board	4/4
Dr Pavel Maslovskiy	Chief Executive Officer	4/4
Mr Damien Hackett ¹	Non-Executive Director	3/3
Mr Robert Jenkins	Non-Executive Director	4/4
Mr Harry Kenyon-Slaney ²	Senior Independent Director	3/4

1. Member from 24 April 2019.

2. Mr Kenyon-Slaney was unable to attend the Committee meeting held on 15 October 2019 due a prior business commitment.

Dear Shareholder

Introduction

I am presenting this report as Chairman of the Nominations Committee, a committee established by the Board of the Company.

In the Chairman's governance introduction, I note that during 2019, we achieved our objective of having a strong, independent, highly qualified and diverse Board, actively engaged in the strategic decision-making and oversight of the Group. The work undertaken by the Committee during the year (and carried through into 2020) has ensured that we have in place an exceptional non-executive team with a breadth of skills, experience and perspectives that are relevant to the next phase of the Company's development.

The Committee continued to fulfil its core responsibilities of reviewing the structure of the Board and committees, recommending new Board appointments and ensuring adherence to formal appointment and induction processes.

Board changes

In 2019, the Committee led the process to identify two new Independent Non-Executive Directors. The Committee approved the appointment of Savannah Group, an external global search consultant, to facilitate these appointments. Savannah, in conjunction with the Committee, developed a candidate specification that highlighted a number of areas of competence required by the Board. These included experience in corporate financing and investment, natural resources and Russia. We sought candidates with experience of dealing at senior levels and the communication skills and personal characteristics to be effective at Board level.

After interviewing a number of well-qualified candidates, we were very pleased to appoint Charlotte Philipps and Katia Ray as Independent Non-Executive Directors of the

Company on 8 November 2019. Their varied and relevant career backgrounds have added to the skills and experience of our Board and its Committees.

On 30 July 2019, Bektas Mukazhanov, who had served as a Non-Executive Director nominated by Fincraft Holdings Ltd (as the Group's major shareholder), resigned from the Board, Fincraft having sold its shareholding to Aeon Mining Limited ('Aeon'). In consequence, on 14 October 2019, we welcomed Mirzaaziz Musakhanov to the Board as a nominee of Aeon.

Mr Musakhanov resigned from the Board on 5 February 2020, following Aeon's decision to sell its Petropavlovsk shareholding. On 21 April 2020 the Board appointed in his place Maxim Kharin, a nominee of the Company's new major shareholder, Uzhuralzoloto Group of Companies ('Uzhuralzoloto'). Prior to the appointment of Mirzaaziz Musakhanov and Maxim Kharin as a Non-Executive Director the Committee considered that they had the relevant experience and skills to make a valuable contribution to the Board. The Company has entered into a formal Relationship Agreement with Uzhuralzoloto and its beneficial shareholder which governs the rights of Uzhuralzoloto, its beneficial holder and the Company and manages any potential conflicts. Such an agreement was also in place with Fincraft and Aeon.

In addition to the appointment of Mr Kharin, the Committee has initiated three further appointments in 2020.

Firstly, on 21 April 2020 the Board was pleased to approve the appointment of Danila Kotlyarov as an Executive Director, upon the recommendation of the Committee. Mr Kotlyarov was appointed as Chief Financial Officer of the Company and a member of the Executive Committee in February 2020. With his expertise and previous Board experience as Finance Director of our associated company, IRC, Danila Kotlyarov is giving authoritative direction to the Company's financial management.

Second on 24 May 2020, the Committee recommended the appointments of Ms Fiona Paulus and Mr Tim McCutcheon as Independent Non-Executive Directors. Mr McCutcheon, who has extensive experience of the natural resources sector in Russia, was interviewed by the Committee following a recommendation from a shareholder. Ms Paulus was recommended as a candidate for the Chairmanship following a lengthy process led by the Senior Independent Director, Harry Kenyon-Slaney, and assisted by the recruitment consultancy Egon Zehnder. (As I have noted in my introductory Chairman's Statement in this Report, in the autumn of 2019 I informed the Nominations Committee and the Board of my intention to retire at the 2020 AGM subject to a suitable successor being found. A Search Committee was then formed under Mr Kenyon-Slaney and criteria agreed.)

Diversity statement

It is a core belief of the Petropavlovsk Board that diverse skills, background, experience and points of view will benefit our organisation and strengthen the Board's effectiveness. During 2019 the Committee focused on enhancing the diversity of the Board, seeking female and younger Directors with relevant qualifications. Our aim was to build a strong, independent, highly qualified and diverse Board, actively engaged in the strategic decision-making and oversight of the Group. This process

Diversity (as at 31 December 2019)

	Male	Female
Board	78%	22%
Executive Committee	86%	14%
Direct Reports to Executive Committee	60%	40%
All Employees	75%	25%



culminated in the appointment of Charlotte Philipps and Katia Ray in November 2019 and the proposed appointment of Ms Paulus and Mr McCutcheon on 27 May 2020, as detailed above.

As of 27 May 2020, the twelve-member Board will comprise nationals of five different countries (the UK, Russia, Germany, the USA and Australia) with a wide range of appropriate backgrounds and experience. As at 31 December 2019 female Directors represented 22 per cent of the total Board membership, compared with an all-male Board as at 31 December 2018. As of 27 May 2020, three out of eight Independent Non-Executive Directors (37%) will be women.

The Committee has taken account of the Hampton-Alexander Review and the Lord Davies Report and will continue to monitor the possibility of legislation on Board composition. It has made appointments to the Board on merit and on its assessment of appropriate qualifications, including its objective of enhancing diversity. These are criteria which the Board intends to maintain.

We are proud of the gender diversity of the Group's general workforce with female employees comprising c.25 per cent, with the percentage of women employed in senior and executive positions at c.30 per cent. Please go to pages 100 and 103 of the Sustainable Development Section of this Report for further details of the Company's 'Diversity and Equal Opportunity' policy.

Succession planning

The Committee focuses on effective succession planning to ensure the future prosperity of the Company.

As I have explained in my introduction to the Annual Report, this will be my last year as Chairman and I am therefore not seeking re-election to the Board at the 2020 Annual General Meeting.

I have served as a Non-Executive Director within the Group for twelve out of the past fourteen years. Having been a Non-Executive Director of Aricom plc from 2006 to 2009, I then became a Director of Peter Hambro Mining plc and Petropavlovsk PLC until 2016, when I retired at the Annual General Meeting. I was asked to return, as Chairman, and elected by shareholders at the 2018 AGM, in order to stabilise the Company and restore corporate governance at a time of great difficulty and turbulence engendered by Board changes in the previous year.

These objectives have now been achieved. Following Pavel Maslovskiy's return as CEO, Petropavlovsk has made exceptional progress in 2019, continuing into 2020.

We have rebuilt the Board and corporate governance to the highest standards. The Board is now focused on a strategy for the Company's further development over the next five years. Now is the right time to appoint a new and younger Chairman who can lead it forward through this period of growth and opportunity. It is also the case that my continued service as Chairman, after so many years in different roles within the Group, could be seen to be outside the parameters of the UK Corporate Governance Code 2018 (the '2018 Code').

The Committee was pleased to note and support the appointment to the Executive Committee on 1 January 2020 of Dmitrii Chekashkin, Group Executive, Business Transformation and Operational Efficiency. Dmitrii has more than 25 years of experience in the gold mining industry. Dmitrii was the Group's former COO, leaving the Group in September 2018 for a sabbatical. Dmitrii has also recently been appointed as the Group's Chief Risk Officer, a new position which is focused on strengthening our risk management framework.

In November 2018 Mikhail Safray was appointed as Senior Legal Advisor. Prior to his appointment Mikhail held a number of senior legal positions with large Russian and international companies. Together with the recent appointment of Danila Kotlyarov, the Executive Committee has also been reinvigorated since the return of Pavel Maslovskiy, Chief Executive Officer in June 2018. The Executive Committee comprises an experienced senior executive team. Please go to [page 133](#) for current membership of the Executive Committee and summaries of their biographies.

Effectiveness of the Committee

The effectiveness of the Committee was reviewed as part of the Board evaluation process undertaken by an external facilitator during 2019. The process identified that although there are no immediate concerns about succession planning at the executive level, with a strong Executive Committee membership, there is scope for the Committee to focus more on senior management succession to ensure that loss of personnel risks are managed well. The Committee intends to fully address this matter during 2020.

It is proposed that Prism, the external facilitator will be appointed during 2020 to undertake a detailed evaluation of all the Board's Committees, including the Nominations Committee.

Re-election of Directors

The Committee has considered in detail the performance and contribution of the Directors who are standing for election or re-election at the Company's 2020 AGM. Following this review the Committee recommended that each Director be put forward for election or re-election by the Company's shareholders at the 2020 AGM.

In accordance with the 2018 Code the specific reasons why the contribution of each Director is, and continues to be, important to the Company's long-term sustainable success will be set out in the 2020 Notice of Annual General Meeting and accompanying papers.



Sir Roderic Lyne
Nominations Committee Chair

26 May 2020

Additional activities of the Committee during 2019:

- Approval of the 2018 Nominations Committee Report;
- Recommendation to the Board of:
 - The appointment of Mr Harry Kenyon-Slaney as Senior Independent Director with effect from 23 April 2019;
 - The appointment of Mr Damien Hackett as a member of the Committee with effect from 24 April 2019; and
- Recommendation to the Board of a change in Board committee membership following the appointment of Ms Charlotte Philipps and Mrs Katia Ray as Independent Non-Executive Directors on 8 November 2019.

Letter from the Audit Committee Chair

Dear Shareholder

While 2019 has been a successful year for Petropavlovsk, we are conscious that the Company operates in a global environment with volatile markets and economies, which in turn influence the gold price and exchange rates. The Committee is also mindful of the increasingly complex governance and accounting frameworks that drive the internal controls and risk management processes of our business. We have taken actions during the year for the enhancement of these.

The current COVID-19 pandemic is a new risk that the Committee has had to consider, particularly in our assessment and appropriateness of the going concern basis of accounting. I am pleased to advise that at the date of this Report, COVID-19 has had minimal impact on our operations with none of our employees having been diagnosed with COVID-19, and to date relatively few cases registered in the Amur region in which the Group's mining operations are located. We continue to ensure that appropriate mitigating actions are taken to ensure the safety of our workforce. The Company has also taken action to support the local communities in the Amur region during these unprecedented times. Please go to [page 6](#) of this Annual Report for further information.

The Committee's focus in 2019

Financial Function, Risk Management Framework and review of controls

During the year the Committee, together with management, have initiated a review to determine implementation proposals to enhance the Group's internal financial reporting, associated processes and risk management controls framework. In 2019, external consultants were engaged to:

- (i) Review the Group's finance function: whilst the Group has a capable, experienced and highly qualified finance team, the review was focused on assessing the structure and processes of the Group's finance function, comparing these with industry best practice; and
- (ii) Review the Group's internal audit function to identify areas for further development.

The outcome of the finance function review is being considered by Mr Danila Kotlyarov, our newly appointed Chief Financial Officer, with proposals to be presented to the Committee for initiation of implementation in 2020.

The key areas for focus during 2020 will include (i) optimisation of the administrative and finance function structure and (ii) enhancing of the Group's budgeting, management accounting and financial reporting processes. This will cover the potential automation of certain processes. The Committee looks forward to reporting further on this in detail and on actions taken in its 2020 Report.

The external review of the Group's internal audit function highlighted the effectiveness and value of the Group's advanced automated data analytics software that has been developed internally. This is being utilised to monitor the control and management of working capital, including inventory and purchasing. It has extended the scope of the work that can be undertaken by our audit team. Although it has increased its effective capacity, the review has highlighted its small staffing size. The Group has acted to address a number of the review's recommendations and has resolved to increase the size of its internal audit staffing and develop the scope of its assurance function.

The review identified further actions that could be taken to strengthen the Group's procedures to manage risks and oversee the Group's internal control framework. I have engaged regularly with the Group Head of Internal Audit on these as well as in external meetings together on risk management with both the Group's external consultants and with leading Russian mining company management responsible for this to consider the role of the internal audit function in meeting the Group's requirements. This will be a principal area of focus for the Committee during 2020. For details of these reviews please go to [page 154](#). In this connection, the Committee has welcomed the recent constitution of a Board Risk Committee in February 2020. This has enhanced the Group's risk management framework. This committee has already completed a review of the Group's risk framework to identify areas for improvement.

Audit tender

In 2019, the Committee, supported by Petropavlovsk's capable finance team, led the audit tendering process for financial years starting from 2020. Deloitte LLP (Deloitte) has been the external auditor of the Company since 2009 when Deloitte won a competitive tender. As outlined in the 2018 Audit Committee Report, this tender process had, in accordance with legislation, been required for the year ended 31 December 2019. However, the tender was deferred for a year due to the change of Board in 2018 and following approval by the Financial Reporting Council.

The Company followed a thorough process in undertaking the tender. This included consideration of the quality and cultural fit of the lead partner and key members of their team, the approach to client services and quality of the audit, technical expertise and independence of the audit firm. The Committee is pleased to announce PricewaterhouseCoopers LLP (PwC) as the successful firm.

The Committee considers PwC to be a first-class candidate and in reaching its decision the Committee considered the overall audit quality and the principal criteria in the tendering process, as well as the experience and expertise of PwC's Russian and UK teams. A resolution will be proposed at the Company's 2020 Annual General Meeting for the appointment of PwC as auditor of the Company.

Significant judgements

Going concern

In March 2019, IRC's bank debt with ICBC was refinanced through new facilities with Gazprombank Joint Stock Company (Gazprombank). These are on more favourable terms, providing a more relaxed amortisation schedule and an extended repayment period to 2026. This has substantially improved the financial stability of both IRC and Petropavlovsk, which provides a guarantee for these loan facilities.

In June 2019, the Group refinanced its US\$100 million 9% Convertible Bonds due March 2020 with the placement of US\$125 million 8.25% Convertible Bonds due July 2024. The additional funds were used to accelerate the construction of the flotation plant at Pioneer, which is due to be commissioned in Q4 2020. As a result, the Company has significantly strengthened its balance sheet, with no debt to repay during the going concern period, being 12 months from the date of signing of the 2019 financial statements.

However, in addition to reviewing and challenging key assumptions of gold price, production and exchange rates, and as noted earlier in this report, the going concern analysis has taken into consideration the potential impact of COVID-19 on the Group's operations. This was a detailed exercise and included consideration of the potential implications to the Group's supply chain, inventory management, purchase and sales logistics and access to capital. After careful consideration the Committee recommended to the Board that the going concern basis of accounting was appropriate for the financial statements for the year ended 31 December 2019.

Other significant judgements for the Committee's consideration at the year-end related to:

- The carrying value of mining assets including the POX Hub;
- Valuation of the Company's investment in IRC; and
- Accounting for Petropavlovsk's guarantee of IRC's debt.

These matters are discussed in more detail later in this Report.

Other matters

Committee membership

The Committee was pleased to welcome Ms Charlotte Philipps, Independent Non-Executive Director, as a member of the Committee on 8 November 2019. Charlotte has extensive experience in corporate financing and equity investment in Russia and in other former USSR and CMEA countries, principally focused on natural resources. She is a qualified lawyer.

As part of her induction as a member of the Committee, Charlotte attended an in-depth briefing session upon her appointment to ensure that she had a proper understanding of relevant matters to enable her to participate fully in her first Committee meeting. She also met separately with Mr Christopher Thomas, the Company's Audit Partner at Deloitte LLP.

The Committee now comprises of five Independent Non-Executive Directors. For full details of Committee membership please go to [page 133](#).

Visits to the Operations

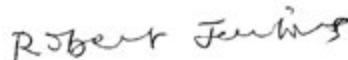
I continue to engage regularly with the Chief Executive Officer, Chief Financial Officer, Group Head of Corporate Reporting and Group Head of Internal Audit, ensuring that I am fully informed of any matters of importance to the Committee.

During the year I have visited both our Moscow Head Office and our mining operations on a number of occasions, meeting with operational management and the Group Chief Geologist to ensure that I have a proper understanding of key issues relating to financial, including risk management and reporting. Additionally, I visited the Group's Scientific Research Centre in Saint Petersburg, whose metallurgical expertise is central to its refractory ore processing capability.

Annual Report

The Committee continues to oversee the reporting process in order to ensure that the information provided to shareholders in this Annual Report taken as a whole is 'fair, balanced and understandable' and allows assessment of the Company's position and performance, business model and strategy. In addition, the Committee has advised the Board on the viability statement required under the UK Corporate Governance Code.

In the following report the Committee has sought to provide shareholders with an understanding of the work that we have done to provide assurance on the integrity of the 2019 Annual Report and financial statements. I hope that you will find this informative.



Robert Jenkins

Audit Committee Chair

26 May 2020

Audit Committee Report continued

Governance

Committee membership and attendance:

Name	Meeting attendance
Mr Robert Jenkins, Committee Chair, Independent Non-Executive Director	5/5
Mr James W. Cameron Jr, Independent Non-Executive Director	4/5 ¹
Mr Damien Hackett, Independent Non-Executive Director	5/5
Mr Harry Kenyon-Slaney, Senior Independent Director	5/5
Ms Charlotte Philipps, Independent Non-Executive Director	1/1

¹. Mr Cameron was unable to attend one meeting due to illness.

Mr Jenkins is considered by the Board as having the requisite and relevant financial experience due to his profession as a Chartered Accountant and his previous roles as Finance Director and Chief Financial Officer of two Russia focused natural resource companies, including a UK AIM listed mining exploration company.

Mr Jenkins was also the Senior Independent Director and Audit Committee Chairman of Ruspetro plc, an independent oil and gas production company, until its delisting from the London Stock Exchange in June 2016. Mr Jenkins has over 25 years' Russia related investment experience. He was also previously Audit Committee Chairman of UK AIM listed Philippines nickel ore producer Toledo Mining Corporation PLC.

Additionally, both Messrs Hackett and Kenyon-Slaney have relevant experience within the mining sector. Mr Hackett has over 25 years' investment analyst research experience covering globally diverse mining companies, initially as Global Head of Mining Research with Credit Suisse – First Boston in Australia, following which he held similar roles with Credit Suisse and Canaccord Genuity in London. Latterly he was Vice Chairman Mining Advisory at Canaccord Genuity responsible for developing investment themes in metals and mining across North America, Europe, Russia and Australia. Mr Kenyon-Slaney is a geologist by professional qualification and his experience spans operations, marketing, projects, finance and business development. He has over 34 years' experience in the mining industry, principally with Rio Tinto and is currently Non-Executive Chairman of Gem Diamonds Limited and a Non-Executive Director of Sibanye Gold Limited, a Johannesburg listed gold precious metal mining group trading as Sibanye-Stillwater.

Mr Cameron, a US qualified lawyer, has extensive international experience, providing expertise and consulting services for

companies particularly within Russia. The Board therefore considers that the Committee as a whole has competence relevant to its responsibilities in the context of the sector in which it operates.

Ms Philipps' experience, as detailed in the Chairman's letter, is considered as relevant experience for her membership of the Committee. The biographies of Audit Committee members are provided on pages [130](#) to [131](#).

The Chief Executive Officer, the Chief Financial Officer, the Group Head of Internal Audit and Group Head of Corporate Reporting and other Directors are invited to attend Committee meetings with representatives of Deloitte LLP, the external auditor, attending all scheduled Committee meetings in 2019. In addition, the Committee Chairman meets on a regular basis with the Chief Financial Officer to discuss any issues and with the lead partner of the external auditor on a regular basis and prior to each Committee meeting. He also has regular meetings with the Group Head of Internal Audit who reports to the Committee.

Mr Christopher Thomas was appointed as lead audit partner in December 2018. Mr Thomas is a Deloitte audit partner based in London who has specialised in the metals and mining sector for almost all of his 22 years at Deloitte. He has been a Partner for ten years and leads the Deloitte UK Metals and Mining audit group.

Summary of the Committee's role and responsibilities

The Committee's terms of reference set out its main responsibilities and are available to view on the Company's website. The Committee is responsible for:

- The integrity of the Company's financial statements and the significant reporting judgements contained in them;

- Where requested by the Board, reviewing the content of the annual report and accounts and advising the Board on whether, taken as a whole, it is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy;
- Where requested by the Board, providing advice on how, taking into account the Company's position and principal risks, the Company's prospects have been assessed, over what period and why the period is regarded as appropriate;
- Advising the Board on whether there is a reasonable expectation that the Company will be able to continue in operation and meet its liabilities as they fall due over the said period, drawing attention to any qualifications or assumptions as necessary;
- The appropriateness of the Company's relationship with the external auditor, including auditor independence, fees and provision of non-audit services;
- The effectiveness of the external audit process, making recommendations to the Board on the appointment of the external auditor;
- The effectiveness of the Group's internal control and financial and tax risk management systems;
- Monitoring and reviewing the effectiveness of the Group internal audit function in the context of the Company's overall risk management system; and
- Leading the external audit tender process.

In carrying out its responsibilities, the Committee has full authority to investigate all matters within its terms of reference. Accordingly, the Committee may:

- Obtain independent professional advice in the satisfaction of its duties at the cost of the Company; and

- Have direct access to the resources of the Group as it may reasonably require including the external and internal auditors.

The Committee's focus during 2019

The Committee met on five occasions during the financial year. During the year, amongst other matters, the Committee:

Financial statements and reports

- Reviewed the 2018 Annual Report and Accounts and the six months' Half Year report ended 30 June 2019 before recommending their adoption by the Board. As part of these reviews the Committee received reports from management and the external auditor, reviewed accounting policies, estimates and judgements applied by management in preparing the relevant statements and the transparency and clarity of disclosure contained within them; and
- Considered whether the 2018 Annual Report and Accounts, taken as a whole were fair, balanced and understandable and reported to the Board on its conclusion.

Risk management

- Considered the output from the Group's financial and tax review process undertaken to identify, evaluate and mitigate risks advising the Board of changes in these risks. Please go to pages 26 to 41 of the Principal Risks and Mitigation section which describes the Group's principal financial risks during the year and actions taken to mitigate them; and
- Received and considered reports detailing litigation in which the Company and/or any of its subsidiaries are involved.

Internal audit

- During 2019, an external consultant was engaged to conduct a review of the Group's internal audit function to identify areas for its further development. A detailed report was provided to the Committee together with a presentation by the external consultant.

This review:

- Assessed the internal audit methodology applied by the internal audit function through each stage of the audit process (from planning to monitoring), its effectiveness and results based on a review of audits performed during 2018 and 2019;
- Evaluated the data analytics audit techniques developed and applied by the internal audit function; and

- Assessed the proficiency of the internal audit function staff, in their experience, knowledge and skills and any requirements for additional development.

Outcome of the review:

- The review made a number of recommendations, some of which have already been actioned. This has included the strengthening of the internal audit function by the appointment of additional staff. The internal audit function now comprises three auditors with the appointment of one more member of the team proposed. The review also identified further actions that could be taken to strengthen the Group's procedures to manage risks and oversee the Group's internal control framework. This will be a principal area of focus for the Committee during 2020;
- In addition, the review commended the Group's data analytics software audit programme which has been developed internally by the Group Head of Internal Audit. This enables the analysis of an entire population of data, including ratio, trend and variance analysis, period-to-period comparisons and benchmarking, allowing the scope of an audit to be increased without requiring additional staff resource;
- The Committee evaluated the effectiveness of the internal audit function, by reviewing the reports, conclusions and recommendations of the Group Head of Internal Audit and discussing these with the Chief Executive Officer and members of the senior executive team. It approved the scope of work to be undertaken by internal audit during 2019, including audits to be performed at the Group's mining operations and at its offices in Moscow and Blagoveschensk. During the year the Group Head of Internal Audit presented his findings to the Committee from various assignments. The presentation included details of issues identified and subsequent actions taken.

Audits undertaken during the year, amongst others, comprised:

- Procurement and supply process – the Group's procurement system and procedures were subject to audit. As part of the review process internal audit designed a data analytics audit software programme. This has proven valuable in assessing large quantities of data and will

be utilised during future audits. Internal audit investigated material price changes, examples of high or low stock levels and obsolete or slow-moving inventories. The audit concluded that the Group's procurement process functioned well. Specific recommendations were made and discussed with management including a new proposed procurement policy. This will be reviewed internally, including by the Committee and formally approved by the Company in 2020;

- Working capital management – the audit of working capital has included a review of inventory and stock control, payables and receivables and obsolete spare parts. The outcome of the working capital management audit together with recommendations will be presented to the Committee in H2 2020;
- Reviewed and approved the 2020 internal audit plan which covers all the Group's mines and its service companies. This will include ongoing monitoring of the procurement and supply process using the data analytics audit software programme, working capital management, budget variance analysis and operating expenses; and
- Reviewed management responses to audit reports issued during the year.

External auditor and non-audit work

- Reviewed, considered and agreed the scope and methodology of the audit work to be undertaken by the external auditor;
- Agreed the terms of engagement for the audit of the 2019 financial statements; and
- The Committee led a tender process for the appointment of an external auditor. Please go to [page 153](#) for further information.

To date in 2020, the Committee has reviewed, in particular, the following matters in relation to the 2019 financial statements:

- Carrying value of the mining assets and their associated impairment;
- Valuation of Company's option to acquire the outstanding 25% shareholding in TEMI LLC;
- Valuation of the Company's investment in IRC;
- Accounting for the guarantee of IRC's debt; and
- The going concern assessment.

Audit Committee Report continued

The Committee has also advised the Board on whether the 2019 Annual Report and Accounts (the '2019 Report') taken as a whole is fair, balanced and understandable and the Directors' statement in this respect is set out on [page 183](#).

The Committee and the Board are satisfied that the 2019 Report meets this requirement, as appropriate weight has been given to both positive and negative developments in the year. In substantiating this statement, the Committee has considered the robustness of the process undertaken in creating the 2019 Report, including:

- A thorough process of review, evaluation and verification of the inputs from the Group's operations undertaken to ensure accuracy and consistency;
- The Committee's consideration of the external auditor's conclusions about the key audit risks that contributed to their audit report, in particular specifically going concern, carrying value and impairment of mining assets, the valuation of the Company's investment in IRC and accounting for the guarantee of IRC's debt; and
- The Company's longer-term Viability Statement as required under Provision

31 of the UK Corporate Governance Code published in July 2018 and considered by the Committee.

Significant issues considered by the Audit Committee in the context of the 2019 financial statements

The Committee identified the issues below as significant in the context of the 2019 financial statements. The Committee considers these areas to be significant taking into the account the level of materiality and the degree of judgement exercised by management. The Committee has debated these issues in detail to ensure that the approaches taken were appropriate.

Issue	Committee action	Conclusion
<p>Carrying value of mining assets including the POX Hub. (See note 6 to the financial statements.)</p> <p>The carrying value of the Group's mining assets which includes the tangible assets attributable to the gold mining operations and the supporting in-house service companies. Where management has identified an indicator of impairment or impairment reversals, an impairment test should be performed.</p> <p>The Group's calculation of value in use for its mining assets remains particularly sensitive to the forecast long-term gold price and the Russian Rouble : US Dollar exchange rate. Consequently, the comparison of the carrying value of the Group's mining assets with their net present value and whether an impairment or reversal of impairment is necessary requires significant judgement.</p>	<p>The Committee has addressed this matter through:</p> <ul style="list-style-type: none"> – Receiving reports from management outlining the basis for the assumptions used, including about the gold price, the discount rate used for the projects, the Russian Rouble : US Dollar exchange rate, production in accordance with the Group's long-term mining plan and the supply of third-party concentrate to utilise the POX Hub's available capacity as well as planned capital expenditure for the construction of processing facilities. Management's analysis included the key risks from future cashflows at Pioneer as the flotation facilities are scheduled for completion in Q4 2020. Management's analysis did not include any risk adjustment for COVID-19 implications considering that these are non-adjusting post-balance sheet events for impairment valuation; additionally, that risk that this will impact the Group's gold mining business is expected to be short-term and will not affect life-of-mine production plans; – Receiving a paper from the Executive Committee recommending the pre-tax reversal of impairment previously recorded against the carrying value of the assets that are part of the Pioneer Cash Generating Unit; and – Discussing with the external auditor their view on the impairment testing procedure including the key assumptions used by management. 	<p>Taking the above into account the Committee is satisfied with the thoroughness of the approach and judgements made.</p> <p>The Committee has considered all relevant facts and circumstances and recommended to the Board reversal of the historical impairment taken at 31 December 2013 against the carrying value of assets relating to Pioneer.</p> <p>Details of this pre-tax impairment reversal of US\$43.5 million are set out in note 6 to the financial statements on page 220 and on page 77 of the Chief Financial Officer's Statement.</p>

Issue	Committee action	Conclusion
<p>Valuation of the Company's investment in IRC</p> <p>(See note 14 to the financial statements.)</p> <p>Petropavlovsk holds a 31.1% interest in IRC and accounts for this investment as an associate using the equity method.</p> <p>On 18 March 2020, the Company entered into a preliminary agreement with Stocken Board AG in relation to a conditional disposal of 29% of its interest in IRC for US\$10 million plus release of its guarantee over IRC's borrowings. The IRC share price also declined during the second half of 2019, implying a US\$34 million market value as at 31 December 2019. Management concluded that these factors represented indicators of impairment.</p> <p>The investment was not an asset held for sale under IFRS 5 Non-current Assets Held for Sale and Discontinued Operations as at the balance sheet date. The recoverable amount of the Company's interest was therefore calculated on a value in use basis. This involved significant judgement by the Company in determining appropriate cash flow forecast assumptions and in assessing the underlying impairment valuations performed by IRC management, noting that no impairments had been recognised by IRC as at 31 December 2019.</p> <p>The key assumptions applied in the valuation were the iron ore price, IRC production volumes and foreign exchange rate forecasts over the lifetime of the operations, the relevant IRC book value to Group equity value adjustments and the discount rate.</p>	<p>The Committee has addressed this matter through:</p> <ul style="list-style-type: none"> – Considering information from management on IRC control considerations in order to assess whether the investment in IRC should be accounted for as an associate using the equity method. – Ensuring a full understanding of the key operational risks of IRC and of the key assumptions applied in the valuation and challenging these. – Considering and challenging management's conclusion that an impairment based on value-in-use calculations as at 31 December 2019 should be taken. – Discussing with the external auditor their view on the proposed impairment. 	<p>After consideration of management's analysis, the Committee agreed with the conclusion that Petropavlovsk does not have de facto control over IRC and that the accounting treatment of IRC as an associate is appropriate.</p> <p>The Committee has also agreed with management's assessment that, based on value-in-use calculations, a US\$23.4 million impairment is appropriate against the US\$72.0 million carrying value of investment in IRC as at 31 December 2019.</p>

Audit Committee Report continued

Issue	Committee action	Conclusion
<p>Valuation of the IRC guarantee</p> <p>On 12 March 2019 Petropavlovsk's shareholders approved the provision of new guarantees for IRC's new US\$240 million loan facility with Gazprombank which replaced the ICBC Facility.</p> <p>The amount outstanding under the Gazprombank facility as at 31 December 2019 was US\$225 million.</p> <p>The Company is required to value its liability for the provision of the guarantee, as well as the associated income stream of guarantee fee payments from IRC, in accordance with IFRS 9 Financial Instruments.</p> <p>The application of the accounting standard valuations of these financial instruments is complex in respect of the applicable methodologies and the determination of the asset and liability values. These take into account a number of factors, including the assessed probability of IRC's future default.</p>	<p>The Committee has addressed this matter through:</p> <ul style="list-style-type: none"> – Engaging a third-party expert; – Receiving information from management; – The Audit Committee Chair discussing the third-party findings with the expert and with management; and – Discussing this matter with management and with the external auditor. 	<p>The financial guarantee contract as at 31 December 2019 was recognised in the amount of 12-month expected credit losses of US\$8.9 million in accordance with the IFRS 9 impairment model.</p>
<p>Going concern statement</p> <p>(See note 2.1 to the financial statements.)</p> <p>A key judgement for the Committee relating to the 2019 financial statements concerned the appropriateness of the basis of accounting.</p> <p>The Directors perform an assessment of the Company's ability to continue as a going concern at the end of each reporting period.</p> <p>The period of the assessment covers at least 12 months from the date of signing of the financial statements.</p>	<p>The Committee has addressed this matter through:</p> <ul style="list-style-type: none"> – Reviewing a paper from management on the going concern assessment, challenging the key assumptions used for both base case and reasonable worst-case downside scenarios. <p>In particular the Committee considered and challenged the assumptions relating to gold production, the future gold price and the Russian Rouble : US Dollar exchange rates assumptions;</p> <ul style="list-style-type: none"> – The Committee also received a paper on IRC's going concern including its future liquidity position given the Company's guarantee over IRC's finance facilities with Gazprombank; – Consideration of the potential consequences of the current COVID-19 pandemic and management's assessment of these, including contingency plans to address such consequences so as to limit any business disruption; and – Consideration of the mitigating actions proposed by management under a reasonable worst case downside scenario during the going concern period, including the postponement of mining works that do not affect gold production in the going concern period and receiving gold sales advances in accordance with concluded agreements. 	<p>Following careful review of all relevant factors and after making enquiries and considering the uncertainties aforementioned and as detailed in the going concern statement on pages 179 to 180, the Committee has a reasonable expectation that the Group will have adequate resources to continue in operational existence for the foreseeable future, being at least the next 12 months from the date of approval of the 2019 Annual Report and Accounts and accordingly, the going concern basis is appropriate for the preparation of the 2019 financial statements. The Committee advised the Board accordingly.</p>

Ensuring independence of the external auditor

Non-audit services

The external auditor's independence is deemed to be impaired if the auditor provides a service that:

- Results in the auditor acting as a manager or employee of the Company or the Group;
- Puts the auditor in the role of advocate for the Company or the Group; and
- Creates a mutuality of interest between the auditor and the Company or the Group.

Petropavlovsk addresses this issue through the following measures:

- The prohibition of selected services;
- Prior approval by the Audit Committee of non-audit services where the cost of the proposed service is likely to exceed £100,000. All other non-audit services are approved by the Chief Financial Officer; and
- Disclosure of the extent and nature of non-audit services.

The majority of non-audit fees paid to Deloitte for the year ended 31 December 2019 were in respect of:

- Their engagement which was limited to that of reporting accountant on the provision of new guarantees by the Company to Gazprombank in relation to the new finance facilities provided to IRC. In accordance with the UK Listing Authority Listing Rules, the provision of the guarantees constituted a Class 1 transaction, requiring shareholder approval. The appointment of Deloitte was approved by the Audit Committee, and an independent review partner was involved in this engagement; and
- Their appointment for the review of the Company's financial statements for the six months' ended 30 June 2019. This is considered as standard practice for a listed company. Approval was given by the Audit Committee.

Deloitte's engagement on the above matters was undertaken in accordance with the Company's policy on the provision of non-audit services, a copy of which can be located on the Company's website or obtained from the Company Secretary. This policy follows the recommendations of the Financial Reporting Council on the provision of non-audit services contained within the Guidance on Audit Committees published in April 2016. The Committee approved the appointment on the basis that it was in accordance with the Company's policy and that Deloitte would be the most appropriate firm to work on the Class 1 Circular within the time available given their detailed knowledge of the Group. This work is typically performed by a company's external auditor. Accordingly, in the opinion of the Committee, the independence and objectivity of Deloitte as external auditor to the Company has not been impaired by their work in this respect.

A breakdown of non-audit fees paid in 2019 is set out in [note 7](#) on [page 221](#) of this Report.

Effectiveness of the External auditor

The Committee has evaluated the effectiveness of the external auditor and as part of this assessment, has considered:

- Deloitte's fulfilment of the agreed audit plan, the quality and robustness of their audit, identification of and response to areas of risk and the experience and expertise of the audit team, including the lead audit partner;
- Deloitte's proposed audit fee for the 2019 interim review and year-end audit and after consideration recommended these to the Board for approval;
- The confirmation from Deloitte that they remain independent and objective within the context of applicable professional standards;
- The deep knowledge of the Company which enhances Deloitte's effectiveness as external auditor; and
- In addition, Committee members completed a structured questionnaire to individually assess the performance of the auditor. This evaluated audit planning, execution, communicating and reporting. The assessment conducted in 2019 for the 2018 audit showed that the audit continued to be assessed as effective.

Audit tender and appointment of external auditor

During 2019, the Company undertook a formal tender process for the appointment of a new external auditor for the financial year ending 31 December 2020. The tender process was supervised by the Committee. To support them in this process, a tender panel was constituted to include the Audit Committee Chair, Mr Damien Hackett, Independent Non-Executive Director, the Chief Financial Officer and the Group Head of Corporate Reporting (the 'Audit Tender Panel').

The tender comprised the following steps:

- In July 2019, a number of audit firms were invited to confirm their willingness to participate in the audit tender, their global capabilities and their assessment of independence. Interested firms were asked to submit proposal documents to the Audit Tender Panel by 30 September 2019;
- Selection criteria, for the evaluation of the audit firms, was approved by the Audit Tender Panel and a timetable was approved to enable a smooth transition for the current auditor, should they not be selected;
- Members of the Audit Tender Panel interviewed potential lead audit partners, both in London and in Moscow;
- Presentations were made by the proposed audit firms to the Committee in December 2019. The Committee discussed the merits of each firm and their teams. The Committee considered the views of the management teams, audit quality and capacity, and the cost proposals presented by each firm; and
- Outcomes of the Committee deliberations were presented to the Board.

PricewaterhouseCoopers LLP (PwC) were selected as the preferred firm. If approved by shareholders, PwC will be the Company's statutory auditor commencing for the year ending 31 December 2020. Resolutions to authorise the Board to appoint and determine the remuneration of PwC will be proposed at the Company's 2020 Annual General Meeting to be held on 30 June 2020.

The Committee would like to thank each firm that participated in the tender and specifically thank Deloitte for their significant contribution to the Group over the years.

Internal Audit

The internal audit function supports the Audit Committee. It also aims to raise levels of understanding and awareness of risk and control throughout the Group.

The Group Head of Internal Audit reports to the Committee Chair and to the Chief Executive Officer.

Assurance – financial and internal controls and risk management

The Committee operates within the following assurance framework established by the Board. The Board has delegated authority to the Safety, Sustainability and Workforce Committee and Executive Committee in addition to the Audit Committee, details of which are as follows.

During 2019 the Board (which received advice from the Audit Committee, Safety, Sustainability and Workforce Committee and Executive Committee) had overall responsibility for the system of internal control and risk management in the Group. On behalf of the Board the Committee has considered the effectiveness of the Group's system of internal control.

As detailed in last year's report of the Committee, the Committee considered various control issues during the 2018 year-end audit. Following discussion with management and Deloitte, the Company's auditor, a leading international accounting firm was engaged in a consulting capacity to undertake a review of the Group's finance function. This was focused on assessing the structure and processes of the Group's finance function, comparing these with industry best practice. The same firm also undertook an external review of the Group's internal audit function to identify areas for further development.

The review concluded that the Group's reporting processes were not as developed as leading industry and Russia peers. It highlighted potential inefficiencies and areas for improvement in the areas of planning, budgeting and management accounting; principally arising from the lack of automation of certain processes in these areas. The Committee recognises, together with management, that the Group's systems need to be developed and enhanced to ensure that high quality information is provided in a timely manner to the executive management and the Board to enable informed decisions.

The Board is committed to improving the integrity of the Group's systems and recognises that this will require investment.

As part of this process, Mr Danila Kotlyarov was appointed as Chief Financial Officer on 1 February 2020. Mr Kotlyarov is highly qualified. He is a fellow member of the Association of Chartered Accountants (ACCA) and a Chartered Financial Analyst (CFA) charter holder. Subsequently some additional organisational and policy changes were implemented across the Finance function of the Company. These steps to strengthen both the skills and depth of the Group's finance team, are considered as an essential first step for the implementation of a finance transformation programme (the 'Plan').

Management will present proposals to the Committee during 2020, including for implementation starting in 2020, to develop further and enhance the Group's internal reporting and associated processes in relation to budgeting, management accounting and financial reporting. This will include the automation of certain processes. The implementation of the Plan has been identified as a Key Performance Indicator for the Company and the implementation of the Plan is one of the annual bonus objectives for the Executive Directors and certain members of the Group's Executive Management (see [page 171](#) for further information).

The Board has also constituted a Risk Committee which has reviewed the Group's risk management framework. Further information in this respect will be provided in the 2020 report of the Committee.

The Committee has also considered and reviewed the Group's financial risks and the mitigating actions to address these and has reported its conclusions to the Board. The system of controls is designed to manage, but may not eliminate, the risks of failure to achieve the Group's objectives. Oversight is provided by the Executive Committee, that reviews the results of the Group's operations.

For IRC, Petropavlovsk operates controls over the inclusion of its financial data but places reliance upon the systems of internal control operating within IRC and the obligations upon IRC's Board relating to the effectiveness of its own systems. IRC ceased to be a subsidiary of the Company and became an associate on 7 August 2015.

Some key features of the internal control system, not detailed above, are:

- A defined management structure with clear accountabilities. There is a clearly defined delegation of authorities, which covers all expenditure;
- Board approval of a Group annual budget, with re-forecasts being made subsequently;
- Review by members of the Executive Committee of detailed management accounts including variance analysis against the approved annual budget, a copy of which is provided to the Board following this review;
- Appropriate segregation of duties throughout the Group, in particular separating purchasing and ordering functions from processing and payments functions;
- A centrally directed treasury function which manages the Company's cash and debt on a daily basis; and
- Specific approval procedures have been established for approval of all related party transactions.

Risk management

The Company has adopted a formal risk management framework with the Board having ultimate responsibility for setting the Group's risk appetite and the Executive Committee having responsibility for on-going risk review and management. The Committee retains responsibility for reviewing financial risks and reporting its findings and recommendations to the Board. The Principal Risks and Mitigation section, summarises the risk management framework together with details of the principal risks of the Group and is on pages [28](#) to [41](#) of this Report.

Overview

As a result of the Committee's work during the year, the Committee has concluded that it has acted in accordance with its terms of reference.



Directors' Remuneration Report

Annual statement from the Chairman of the Remuneration Committee (the 'Committee')

Dear Shareholder

Introduction

On behalf of the Board, I am pleased to present the Directors' Remuneration Report for the year ended 31 December 2019.

The Committee comprises five independent Directors: I continue to act as Committee Chair, with my colleagues James Cameron and Damien Hackett, together with Charlotte Philipps and Katia Ray, both of whom joined the Committee on 8 November 2019, as the other four members.

Review of 2019

2019 was one of the Company's most successful years. We made significant progress in our core strategy of leveraging the technologically advanced POX Hub to unlock the value of ore, whilst focussing on our responsibilities as a business for the benefit of all our stakeholders. We successfully refinanced the Group's US\$100 million Convertible Bonds due March 2020, thereby strengthening our balance sheet. The Lost-Time Injury Frequency Rate, which reflects the number of accidents per million man-hours worked and is a key indicator of the Group's health and safety performance, improved from 2.52 in 2018 to 1.61 in 2019, a substantial reduction of c.36%. The safety of our employees is of paramount importance to the Board. Accordingly, we use health and safety not only as a bonus objective but as a discretionary underpin to reduce any pay-out should the Committee decide that a deterioration in the Group's health and safety performance warrants this.

The 2019 bonus targets were directly linked to these key performance indicators and strategic initiatives. Specifically, objectives for Dr Maslovskiy were heavily weighted towards the successful ramping up of the POX Hub (weighted 50% of maximum) given its critical importance to the Group's strategy. Other targets related to the refinancing of the Group's US\$100 million 9% Convertible Bonds due 2020, gold production and improvement in the Group's health and safety performance.

All of these objectives were achieved in full and therefore a bonus of 100% of salary was awarded to Dr Maslovskiy. The Committee reviewed the formulaic outcome in the context of the Company's underlying business performance and concluded that it was appropriate and that no further discretionary adjustment was required. Half of the bonus will be paid in cash, with

the balance in the form of deferred bonus shares, vesting after one year.

As mentioned in last year's report, 2019 was also the first year since 2011 in which awards were made under the Company's Long-Term Incentive Plan. Awards will vest subject to relative total shareholder return ('TSR') performance against a bespoke gold mining index (weighted 70%) and a balanced scorecard of objectives (30%), measured over three years. Further details are provided in the Annual Report on Remuneration.

As a Remuneration Committee, we endeavour to ensure that our strategic goals are reflected and reinforced through our remuneration policies and pay arrangements. In this way, we ensure that remuneration outcomes for executives reflect business performance and the returns that we deliver to our shareholders.

The Committee was pleased to note that in December 2019, Dr Pavel Maslovskiy, Chief Executive Officer purchased 17.4 million Ordinary Shares equating to around GBP2.262 million using his own funds.

We have not included a Chief Executive Officer pay ratio as the Company has only 15 employees based in the UK, so that any resulting ratios would not be meaningful.

Review of the Remuneration Policy

The Committee has reviewed the Company's Remuneration Policy (the 'Policy'). Following this review, the Committee is proposing a number of revisions to the Policy, which represent a refinement of the existing Policy rather than a significant reshape; the main changes are as follows:

– Long-Term Incentive Plan ('LTIP')

The Committee is proposing to increase the maximum annual award under the LTIP from 100% to 150% of salary, with the size of any actual award determined annually based on the business circumstances at the time and at the Committee's discretion. The revised maximum will apply under all circumstances, including recruitment. The level of vesting at 'threshold' (expected performance) will be reduced from 30% to 25% of maximum.

– The previous LTIP expired in June 2019, and therefore we will be seeking shareholder approval for a new plan at the 2020 Annual General Meeting ('AGM'). The overall framework of the plan remains unchanged, although a number of amendments are proposed (e.g. to leaver provisions) to bring the plan into line with prevailing best practice.

– Annual bonus

The maximum opportunity under the annual bonus is proposed to be increased to 150% of salary (from 100% currently), to help ensure the overall remuneration package is appropriately focused on variable pay elements and is competitive with that of sector comparators. The revised maximum will apply under all circumstances, including recruitment. The pay-out at target will be reduced from 50% to 30% of maximum. The Committee is also proposing to formalise its bonus deferral arrangements, such that one-third of any bonus earned is deferred in Company shares for a period of three years. Malus and clawback provisions will apply for a period of up to two years following vesting.

– Post-termination shareholding requirement

In line with current best practice, the Committee proposes to introduce a post-termination shareholding requirement for Executive Directors as part of the proposed Policy. Executive Directors will normally be expected to maintain a holding of Company shares at a level equal to the in-post shareholding guideline (being 150% of salary) for a period of two years from the date the individual ceases to be a Director. The specific application of this requirement will be at the Committee's discretion but will apply to share awards granted under the Policy from the 2020 financial year. There will be no requirement to hold shares post-termination which have been purchased independently by the executive.



The Committee has ensured that the proposed revised Policy and practices remain consistent with the six principles set out in Provision 40 of the UK Corporate Governance Code. Specifically, the Policy is clear, simple, well understood by our executives, and clearly communicated to our shareholders. The design of the Policy was guided closely by the Company's risk appetite; mandatory bonus deferral, LTIP holding, and the malus and clawback provisions support long-term decision-making and discourage excessive risk-taking. Incentives are appropriately capped, and the pay mix is in line with market norms. Finally, the performance measures in incentives are appropriately aligned with the Company's strategy and culture, particularly around health and safety.

The Committee commenced a consultation process with selected major shareholders on the proposed revisions to the Policy earlier this year. The consultation is ongoing, having been delayed in part due to COVID-19. Based on feedback thus far, shareholders have indicated their support for the proposals. We thank those who have engaged with us so far, and welcome further comments ahead of the AGM.

Implementation of proposed Remuneration Policy in 2020

In early 2020, the Committee considered and approved annual bonus targets for 2020. These targets are aligned with the Group's strategy, including unlocking the value creation potential of the POX Hub, strengthening the balance sheet, increasing liquidity, and ensuring the safety of our employees and of those that visit our operations, which is of paramount importance to the Board. Further details of the 2020 annual bonus targets are provided on page 171. Subject to shareholder approval of the revised Policy, the maximum bonus opportunity for 2020 will be 150% of salary.

An LTIP award of 150% of salary is proposed for 2020, subject to shareholder approval. Vesting will be based on relative TSR performance against a bespoke gold mining index, measured over three years. Further details are provided in the Annual Report on Remuneration.

For 2020, the Chief Executive Officer's salary will remain unchanged at £655,000.

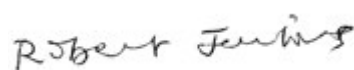
Mr Danila Kotlyarov was appointed as Chief Financial Officer on 1 February 2020 and as an Executive Director on 21 April 2020. Mr Kotlyarov was appointed as Chief Financial Officer on a salary of £500,000 on his promotion to the Board. Mr Kotlyarov will be participating in the annual bonus scheme for 2020, and will also receive an award under the LTIP.

In addition, on 21 April 2020, Mr Maxim Kharin was appointed as a Non-Executive Director of the Company. Mr Kharin receives a fee of £80,000, being the basic fee paid to the Company's Non-Executive Directors.

Impact of COVID-19 on remuneration

The Committee appreciates that the current COVID-19 pandemic is having an impact on decisions by remuneration committees globally. To date, our mining operations remain strong, as does Petropavlovsk's share price. Unlike many other companies, we are fortunate in that we do not currently envisage having to make any redundancies or reduce our operations as a result of COVID-19. In this context, we do not currently propose to reduce the overall remuneration levels, including the proposed 2020 LTIP awards, of our Chief Executive Officer, Chief Financial Officer and the executive team, who have taken considerable steps to safeguard our employees and operations during this pandemic. Nevertheless, the situation is dynamic; the Committee notes recent comments to UK public companies from some institutional shareholders and will keep this matter under review over the coming months.

I hope that you find this report to be clear and informative. The Committee would welcome engagement should you have any questions or comments on any aspect of this year's report, including the revised Remuneration Policy. We hope to have your support at the upcoming AGM.



Robert Jenkins

Remuneration Committee Chairman
26 May 2020

Directors' Remuneration Report continued

Contents of this Report:

This report sets out details of the proposed 2020 Remuneration Policy for Executive and Non-Executive Directors, describes the proposed implementation of that Policy for the year ended 31 December 2020, and discloses the amounts paid relating to the year ended 31 December 2019.

The report complies with the provisions of the Companies Act 2006 and Schedule 8 of The Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013. The report has been prepared in line with the recommendations of the UK Corporate Governance Code and the requirements of the UKLA Listing Rules.

Remuneration Policy

The Company is seeking shareholder approval for a revised Remuneration Policy (the 'Policy'), as set out in this section, at the Annual General Meeting to be held on 30 June 2020. This Policy represents a refinement of the Company's existing arrangements, rather than a significant change to structure.

The main changes to the Policy as compared with the Policy approved by shareholders at the 2018 Annual General Meeting, are as described in the Chair's letter and as follows:

- The maximum annual award under the Long-Term Incentive Plan will be increased from 100% to 150% of salary, with actual award levels determined annually; threshold vesting will be reduced from 30% to 25% of maximum;
- The maximum opportunity under the annual bonus will be increased from 100% to 150% of salary, with target pay-out reduced from 50% to 30% of maximum; one-third of any bonus earned will be mandatorily deferred in Company shares for a period of three years;
- The maximum incentive opportunities in respect of a new Executive Director appointment, whether an internal promotion or external hire, will be aligned with those set out in the Policy Table; and
- Post-exit shareholding requirements will be introduced, whereby a departing Executive Director will be expected to hold shares equivalent to 150% of salary for a period of two years from the date the individual ceases to be a Director.

Policy Table

Remuneration element	Base salary
Purpose and link to strategy	To provide a market-competitive level of guaranteed cash earnings in order to attract and retain high-calibre Executive Directors to manage and execute the Board's strategic plans.
Operation	<p>The Committee reviews base salaries annually. Salary increases typically take effect from 1 January each year, unless there is a significant change in the responsibilities of the role.</p> <p>Reviews take account of:</p> <ul style="list-style-type: none">– The individual performance of the Executive Director, his or her experience, skills and potential;– The challenges intrinsic to that individual's role;– Market-competitiveness within the Group's sector;– Salary increases across the wider employee population; and– The wider pay environment.
Maximum opportunity	<p>There is no prescribed maximum salary.</p> <p>It is generally expected that increases will be no higher than inflation, and no higher than that provided to the wider workforce though the Committee has discretion to apply a higher increase in exceptional circumstances, e.g. significant increase in role size or complexity, promotion, exceptional performance, or any other factors the Committee considers relevant within the context of the Group's overall Policy.</p>
Performance metrics	Not applicable, although the individual's contribution and overall performance is one of the considerations in determining the level of any salary increase.

Remuneration element	Benefits
Purpose and link to strategy	To provide market-competitive benefits to ensure that the overall remuneration package is competitive.
Operation	<p>Benefits may include (but are not limited to):</p> <ul style="list-style-type: none"> – Private medical insurance for the individual and family; – Life assurance up to 4x salary, subject to underwriting; – Ill-health income protection; and – Travel insurance whilst on Company business. <p>Other benefits may be provided at the discretion of the Committee based on individual circumstances and business requirements, such as appropriate relocation allowances and support.</p>
Maximum opportunity	The cost of these benefits to the Company is dependent upon market rates and availability of the respective benefits.
Performance metrics	Not applicable.

Remuneration element	Pension
Purpose and link to strategy	To provide market-competitive pension benefits in line with the wider workforce whilst ensuring no undefined liability for the Company.
Operation	Executive Directors may receive contributions from the Company into a personal pension plan or similar savings vehicle.
Maximum opportunity	<p>A Company contribution of up to 12.5% of salary, depending on length of service, is made to a personal pension arrangement with a minimum contribution from the Executive Directors of 3% of salary. The individual may instead receive, in part or in whole, cash in lieu of pension, provided by way of a salary supplement. These arrangements depend on the individual circumstance and residence of the Executive Director concerned.</p> <p>The Chief Executive Officer and the Chief Financial Officer do not currently receive any pension benefits. Pension benefits for any new Executive Directors will be no higher than that available for the Company's UK employees.</p>
Performance metrics	Not applicable.

Remuneration element	Annual bonus
Purpose and link to strategy	To ensure a focus on, and provide a financial incentive for, the delivery of the annual budget and other short-term financial and strategic imperatives. The deferred element aligns the interests of Executive Directors and shareholders and supports retention.
Operation	<p>Performance measures and targets are set by the Committee with the bonus payable determined by the Committee after the year-end, based on achievement against the pre-determined targets.</p> <p>One-third of any bonus earned will be mandatorily deferred in the Company's shares for a period of three years, though the Committee has discretion to defer a greater proportion, of up to 100% of bonus earned, in any given year. The Committee retains the discretion to allow dividends (or equivalent) to accrue over the vesting period in respect of awards that vest.</p> <p>Malus and clawback provisions may be applied for up to a period of two years post-payment in respect of the cash element, and for two years post-vesting in respect of the deferred element in exceptional circumstances, including but not limited to material misconduct, material misstatement of the results, and a calculation error and/or poor information when calculating the reward outcome. Please also refer to footnote 1 at the top of page 161.</p>
Maximum opportunity	<p>Maximum bonus opportunity is 150% of salary.</p> <p>For target level performance, the bonus earned is 30% of maximum.</p>

Directors' Remuneration Report continued

Remuneration element	Annual bonus
Performance metrics	<p>Performance is assessed against a range of strategically important measures which may vary each year depending upon the annual priorities of the Group.</p> <p>It is the Committee's current intention that the bonus is entirely linked to the achievement of Group strategic objectives, which may include measures such as:</p> <ul style="list-style-type: none">– Health and safety;– Annual gold production;– Total Cash Costs♦;– All-in Sustaining Costs♦;– Net debt♦;– Free cashflow;– Strengthening of balance sheet;– Delivery of Capital Expenditure♦ projects on time and within budget; and– Exploration success. <p>Details of the measures applicable for the financial year under review are provided in the Annual Report on Remuneration.</p> <p>The bonus scheme is not a contractual entitlement and the bonus is payable at the discretion of and subject to the approval of the Remuneration Committee. The Committee has the discretion to take into consideration the underlying performance of the Group when adjudicating bonus payments. The Committee may also include a discretionary underpin in the annual bonus plan to capture material adverse events, e.g. material events relating to health and safety and reputational damage.</p>
Remuneration element	Long-Term Incentive Plan ('LTIP')
Purpose and link to strategy	<p>To reinforce long-term shareholder alignment through annual awards of performance shares vesting only on the satisfaction of challenging long-term performance conditions.</p>
Operation	<p>Awards of conditional shares and nil-cost options are made which vest based on performance over a minimum of three years. Awards vest on no earlier than the third anniversary of grant subject to (i) the satisfaction of performance targets, and (ii) continued employment on the vesting date. There is no opportunity to retest the performance conditions.</p> <p>The Committee retains the discretion to allow dividends (or equivalent) to accrue over the vesting period in respect of the awards that vest.</p> <p>A two-year post-vesting holding period will apply to awards. Vested shares may not be sold during the holding period except to cover tax liabilities.</p> <p>Malus and clawback provisions may be applied for up to a period of two years post-vesting in exceptional circumstances, including but not limited to material misconduct, material misstatement of the results, and a calculation error and/or poor information when calculating the reward outcome. Please also refer to footnote 1 at the top of page 161.</p>
Maximum opportunity	<p>The maximum annual award is 150% of salary, with actual award levels determined annually based on the business circumstances at the time and at the Committee's discretion.</p> <p>Threshold performance will result in vesting of no more than 25% of the award.</p>

Remuneration element	Long-Term Incentive Plan ('LTIP')
Performance metrics	<p>The Committee will regularly review the performance conditions and targets to ensure that they are aligned to the Group's strategy and that they are sufficiently challenging. The relevant metrics and the respective weightings may vary each year based upon the Company's strategic priorities.</p> <p>Details of the measures, weightings and performance targets used for specific LTIP grants are included in the Annual Report on Remuneration as relevant.</p> <p>The Committee has the discretion to take into consideration the underlying performance of the Group, as well as any material adverse events (e.g. material events relating to health and safety and reputational damage), when adjudicating LTIP vesting.</p>

Note 1: Given the international nature of the Group's business, the Company's ability to operate and/or enforce certain provisions and remuneration arrangements such as the malus and clawback provisions may be restricted by relevant local laws.

The Committee reserves the discretion to make minor amendments to this Policy without the need to seek shareholder approval. Any such changes will be reported to shareholders in the following year's Annual Report on Remuneration.

Payments from previously agreed remuneration arrangements

The Committee reserves the right to make any remuneration payments, notwithstanding that they may not be in line with the Policy where the terms of the payment were agreed either before the Policy came into effect or at a time when the relevant individual was not a Director of the Company and in the opinion of the Committee, the payment was not in consideration for the individual becoming a Director of the Company. This does not apply to pension benefits (if any) for new appointments to the Board. Details of any such payments will be set out in the Annual Report on Remuneration as they arise.

Explanation of performance metrics chosen

Performance targets are set to be stretching and achievable, taking into account the Group's strategic priorities and the environment within which the Group operates. In setting these performance targets the Committee will take into account a number of different reference points, which may include the Group's long-term mining plan, budgets and operational plans.

In respect of the annual bonus, strategic objectives are selected to ensure the delivery of the Company's immediate objectives within the wider context of the Group's long-term strategy and corporate responsibilities. Other supporting annual objectives are selected to reflect the Company's key financial objectives, exploration success, delivery of specific investment projects, and health and safety objectives, and rewards delivery against these.

The Committee retains the discretion to adjust the performance targets and measures where it considers it appropriate to do so (for example, to reflect changes in the structure of the business and to assess performance on a fair and consistent basis from year to year).

Remuneration Policy for other employees

A large percentage of the Group's employees are based at the Group's mines in the Amur region in the Far East of Russia, whilst corporate, administrative and support staff are based at the Group's offices in Blagoveschensk, Moscow and London. The Board aims to ensure that employees are paid competitively within the region. Employees based at the Group's mines receive base salary, shift and production related bonuses where applicable to their role, together with certain benefits.

It is proposed that members of the Executive Committee and other senior employees will participate in the 2020 LTIP award in order that they have the opportunity to share in the Group's success, aligning their interest with those of the Executive Directors and shareholders. LTIP performance conditions will be the same for all participants, while award sizes will vary according to level of seniority.

The key difference between Executive Directors' (and Executive Committee members') remuneration and that of other employees is that, overall, the Remuneration Policy for the former group is more heavily weighted towards variable pay.

The Company does not have an all-employee share ownership plan. The Board believes it more appropriate and beneficial to the general workforce to reward employees below senior employee level with bonus payments, based on the achievement of targets that are relevant to their positions and which they can influence.

Shareholding guidelines

Shareholding requirements are in place whereby Executive Directors are expected to build up a shareholding equivalent to 150% of their salary, typically over a five-year period commencing on the date of their appointment to the Board.

Dr Pavel Maslovskiy, Chief Executive Officer, has a shareholding of 17,400,000 Petropavlovsk PLC ordinary shares. As at 31 December 2019, this was valued at c.£2.216 million, representing over 300% of Dr Maslovskiy's salary as at 1 January 2020. The new CFO, who was appointed in April 2020, has no Petropavlovsk shares. He will be working towards achieving the guideline over a period of five years from appointment to the Board.

With effect from the 2020 AGM, Executive Directors will also be subject to a post-exit shareholding requirement. Executive Directors will normally be expected to maintain a holding of Company shares at a level equal to the in-post shareholding requirement (currently 150% of salary) for a period of two years from the date the individual ceases to be a Director. The specific application of this shareholding requirement will be at the Committee's discretion.

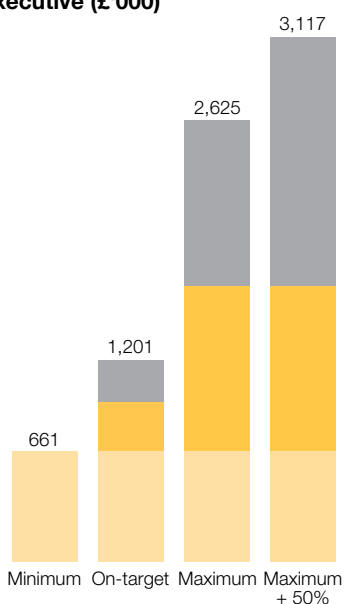
Directors' Remuneration Report continued

Illustration of the application of the Remuneration Policy

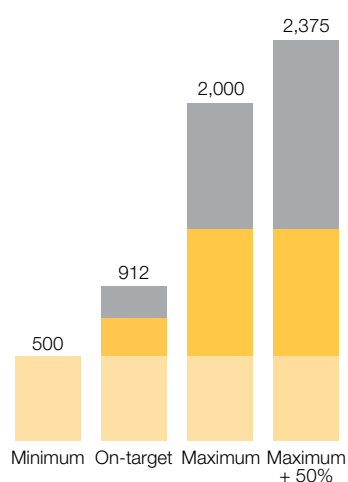
The charts below provide an estimate of the potential future reward opportunities for the Chief Executive Officer and the Chief Financial Officer based on the remuneration opportunities expected to be granted in 2020. Potential outcomes for the Chief Executive Officer and the Chief Financial Officer are shown based on four different performance scenarios: 'minimum', 'on-target' (i.e. in line with the Company's expectations), 'maximum', and maximum plus 50% share price appreciation (a scenario where 50% share price appreciation is included).

Performance scenario

Chief Executive (£'000)



Chief Financial Officer (£'000)



% of total remuneration

Key

- Multi-year Variable
- Single-year Variable
- Fixed pay

	Minimum	On-target	Maximum	Maximum + 50%
Multi-year variable	0.0%	20.5%	37.4%	47.3%
Single-year variable	0.0%	24.5%	37.4%	31.5%
Fixed pay	100%	55.0%	25.2%	21.2%

	Minimum	On-target	Maximum	Maximum + 50%
Multi-year variable	0.0%	20.5%	37.5%	47.4%
Single-year variable	0.0%	24.7%	37.5%	31.6%
Fixed pay	100%	54.8%	25.0%	21.1%

These graphs exclude the effect of any appreciation in the Company's share price except in the 'Maximum+50%' scenario.

Assumptions:

Performance scenario	Includes
Minimum	Salary plus benefits. No bonus payout No vesting under the LTIP
On-target	Salary plus benefits. 30% of maximum annual bonus payout (i.e. 45% of salary) 25% of maximum vesting under the LTIP (i.e. 37.5% of salary)
Maximum	Salary plus benefits. 100% of maximum annual bonus payout (i.e. 150% of salary) 100% of maximum vesting under the LTIP (i.e. 150% of salary)
Maximum +50%	Salary plus benefits. 100% of maximum annual bonus payout (i.e. 150% of salary) 100% of maximum vesting under the LTIP, plus 50% share price appreciation

Approach to recruitment and promotion

The Committee's policy is to set pay for new Executive Directors within the existing Remuneration Policy in order to provide internal consistency. The Committee aims to ensure that the Company pays no more than is necessary to appoint individuals of an appropriate calibre.

Remuneration element	Policy
Base salary	Salary for a new Executive Director appointment, whether an internal promotion or external hire, would be set at a level sufficient to attract the best candidate available to fill the role, taking into account the Group's position and strategy, market conditions and country of residence. The Committee would be prepared to set the salary of a new hire at a premium to those paid to the predecessor if this was necessary to attract and appoint a candidate with the requisite experience, seniority and calibre.
Benefits	Benefits will be set in accordance with the Remuneration Policy. In addition, where necessary, the Committee may approve the payment of relocation expenses in line with local market norms to facilitate recruitment, for a period of up to two years. Flexibility is retained to pay for legal fees and other costs incurred by the individual in relation to his or her appointment.
Pension	Pension will be set in accordance with the Remuneration Policy capped at 12.5% of salary subject to any particular considerations for a recruit who will be principally based outside of the UK.
Annual bonus	The annual bonus will operate in line with the Remuneration Policy. Depending on the timing of the appointment and responsibilities of the appointee, it may be necessary to set different performance measures and targets initially.
Long-term incentives	LTIP awards will be granted in line with the Remuneration Policy. An award may (and would usually) be made upon appointment, subject to the Company not being prohibited from doing so. For an internal hire, existing awards would typically continue over their original vesting period and remain subject to their original terms; further awards may also be considered, subject to the cap in the Policy.

In addition, in the case of an external hire, the Committee may offer additional cash and/or share-based elements when it considers these to be in the best interests of the Company (and therefore shareholders) to facilitate the buy-out of value forfeit on joining the Company. Such payments would take account of remuneration relinquished when leaving a former employer and would reflect (as far as possible) the nature and time horizons attaching to that remuneration and the impact of any performance conditions. Any such buy-out would not have a fair value higher than that of awards forfeited. The Committee will use the components of the Remuneration Policy when suitable but may also avail itself of Rule 9.4.2 of the Listing Rules. Shareholders will be informed of any such payments at the time of appointment.

Executive Director service contracts

Executive Directors have service contracts with the Company which provide for a twelve-month notice period, from both the Company and the Executive Directors. The Executive Directors of the Company are Dr Pavel Maslovskiy, Chief Executive Officer and Mr Danila Kotlyarov, Chief Financial Officer.

If the Company terminates the employment of an Executive Director with immediate effect, in the absence of a breach of the service agreement by the Director, a payment in lieu of notice may be made. This may include base salary, pension and benefits. Benefits may also include, but are not limited to, legal fees.

Executive Directors' service contracts may be terminated without notice for certain events,

such as gross misconduct. No payment or compensation beyond sums accrued up to the date of termination will be made if such an event occurs.

The Committee will retain discretion to approve new contractual arrangements with departing Executive Directors including settlement, confidentiality agreements, providing the provision of outplacement services, agreement of restrictive covenants and consultancy arrangements. The Committee will use its discretion in this respect sparingly and will enter into such arrangements only where the Committee believes that it is in the best interests of the Company and its shareholders to do so.

The date of the Executive Directors' service contracts are as follows:

Executive Director	Position	Effective date of contract
Executive Director	Position	Effective date of contract
Pavel Maslovskiy	Chief Executive Officer	29 June 2018
Danila Kotlyarov	Chief Financial Officer	1 February 2020

Directors' Remuneration Report continued

Leaver and change of control provisions

The section below details how outstanding awards under incentive plans are treated in specific circumstances where the Executive Director's employment has terminated or where there has been a change of control or similar transaction event. Final treatment remains subject to the Remuneration Committee's discretion. When considering the use of discretion, the Committee reviews all potential incentive outcomes to ensure that any application of discretion is fair to both shareholders and participants.

Plan	Scenario	Timing and calculation of payment/vesting
Annual bonus	All leavers.	Any bonus payment will be at the discretion of the Committee and the decision to award a bonus, in full or in part, will depend on a number of factors including the circumstances of the individual's departure and their contribution to the Group during the bonus period in question. Any bonus amount paid will typically be pro-rated for the period of time that the Executive Director has been employed during the relevant bonus period and will be paid at the usual time.
	Change of control.	The Committee will assess the most appropriate treatment for the outstanding bonus period according to the circumstances.
Deferred bonus shares	Good leavers (defined as death, injury, ill-health, disability, retirement with agreement of the Committee, the employing company or business being sold out of the Group, or any other reason that the Committee determines appropriate).	Awards will normally vest on the original vesting date, with Committee discretion to accelerate vesting.
	All other leavers.	Awards will lapse.
	Change of control.	Awards will normally vest immediately and will be pro-rated for time. Alternatively, awards may be exchanged for new equivalent awards in the acquirer where appropriate.
LTIP	Good leavers (defined as death, injury, ill-health, disability, retirement with agreement of the Committee, the employing company or business being sold out of the Group, or any other reason that the Committee determines appropriate).	Awards will normally vest on the original vesting date, with Committee discretion to accelerate vesting. The extent to which awards vest in these circumstances will be determined by the Committee, taking into account the extent to which the performance conditions have been satisfied and the period from the date of grant up to the date of cessation.
	All other leavers.	Awards will lapse.
	Change of control.	Awards will normally vest immediately, subject to performance, and will be pro-rated for time unless the Committee determines otherwise. Alternatively, awards may be exchanged for new equivalent awards in the acquirer where appropriate.

Remuneration Policy for Non-Executive Directors

Non-Executive Directors do not receive benefits from the Company and they are not eligible to receive pension contributions or participate in any bonus or incentive plan. Any reasonable expenses that they incur in the deliverance of their duties are reimbursed by the Company.

Details of the Policy on Non-Executive Director fees are set out in the table below.

Remuneration element	Fees
Purpose and link to strategy	To attract and retain high-performing independent Non-Executive Directors by ensuring that fees are competitive and fair.
Operation	Paid monthly in arrears and reviewed annually by the Board, after recommendation from the Non-Executive Chair. Fee increases, if applicable are normally effective from 1 January.
Maximum opportunity	There is no prescribed maximum annual increase although fees are determined by reference to time commitment and relevant benchmark market data. The Chair of the Audit Committee, the Remuneration Committee, the Risk Committee, the Safety, Sustainability and Workforce Committee and the Senior Independent Director may also receive an additional fee in recognition of the greater time commitment. The aggregate annual fees are limited to GBP1.0 million under the Company's Articles of Association.
Performance metrics	Not applicable.

In recruiting a new Non-Executive Director, the Board will use the Policy as set out in the table above.

Non-Executive Directors are appointed for an initial term of three years and have formal letters of appointment setting out their duties and responsibilities. The appointment can be terminated by paying in lieu of the notice period with such pay being limited to the Non-Executive Director's basic fees. Dates of Non-Executive Director appointments are as follows:

Name	Date of original appointment	Unexpired term as at 31 December 2019	Date of appointment/last reappointment at AGM	Notice period
Roderic Lyne	29 June 2018	18 months	2019	3 months
James W. Cameron Jr.	15 October 2018	21 months	2019	3 months
Damien Hackett	15 October 2018	21 months	2019	3 months
Robert Jenkins	29 June 2018	18 months	2019	3 months
Harry Kenyon-Slaney	7 November 2018	22 months	2019	3 months
Charlotte Philipps	8 November 2019	34 months	N/A	3 months
Katia Ray	8 November 2019	34 months	N/A	3 months
Maxim Kharin	21 April 2020	N/A	N/A	3 months

Consideration of employment conditions elsewhere in the Company

The Committee consider the level of salary increases that have been made to the Group's employees when considering salary increases for the Executive Directors and members of the Executive Committee, whilst also taking into consideration the diverse nature of the roles, responsibilities, and geographic locations and economies of the

Group's workforce. The Company does not currently actively consult with employees on executive remuneration.

Further information on the Group's employment policies are provided in the Sustainable Development Report on pages [100](#) and [104](#) of this Annual Report

How the views of shareholders are taken into account

The Committee considers shareholder feedback and comment from corporate governance bodies received in relation to the AGM each year. The Committee will take these comments into consideration when reviewing the Remuneration Policy. The Committee will consult with its major shareholders in advance of making any material changes to remuneration.

Directors' Remuneration Report continued

Annual Report on Remuneration

The following section provides details of how the Company's 2018 Remuneration Policy was implemented during the financial year ending 31 December 2019, and how the proposed 2020 Policy will be implemented in 2020. Any information contained in this section of the report that is subject to audit is highlighted.

The Remuneration Committee

Membership and process

Members	From	To	Number of meetings in 2019 – Attendance/Eligibility
Robert Jenkins (Chairman)	29 June 2018	Present	3/3
Damien Hackett	12 November 2018	Present	3/3
James W. Cameron ¹	12 November 2018	Present	2/3
Charlotte Philipps	8 November 2019	Present	0/0
Katia Ray	8 November 2019	Present	0/0

1. Mr Cameron was unable to attend one meeting due to illness.

The principal role of the Committee is to recommend to the Board the framework and Policy for the remuneration of the Company's Non-Executive Chair, the Executive Directors, any newly appointed Executive Director, the Company Secretary and members of the Executive Committee. In addition, and in consultation with the Chief Executive Officer as appropriate, the Committee is responsible for reviewing the total individual remuneration package of each Executive Director and for reviewing annual proposals for the Executive Committee members. The Committee's terms of reference are available on the Company's website at www.petropavlovsk.net.

Activities of the Committee during 2019

The Committee held four formal meetings during the year. Key activities during the year included:

- Review and approval of the 2018 bonus outcome;
- Determination of performance measures and targets, and award levels, for the 2019 annual bonus and 2019 LTIP awards for the Chief Executive Officer and members of the Executive Committee;
- Review and approval of the outcome of the 2018 annual bonus;
- Review and approval of the 2018 Directors' Remuneration Report;
- Consideration and approval of new performance conditions for the Long-Term Incentive Plan; and
- Approval of the 2019 LTIP grants.

In addition, Ms Philipps and Mrs Ray attended a Remuneration Committee induction session following their appointment to the Committee on 8 November 2019.

External advisers

In carrying out its responsibilities, the Committee is independently advised by external advisers.

Mercer Kepler (part of the MMC group of companies), independent remuneration consultants appointed by the Committee after consultation with the Board, continued to act as the remuneration adviser to the Committee during the year. Mercer Kepler provides advice on remuneration for executives, benchmarking analysis, regular market and best practice updates, and support with drafting of the Directors' Remuneration Report. Mercer Kepler is a signatory to the Code of Conduct for Remuneration Consultants of UK-listed companies (which can be found at www.remunerationconsultantsgroup.com).

Mercer Kepler reports directly to the Committee Chair and neither Mercer Kepler nor any other part of the MMC group of companies provides any other services to the Company, with the exception that Marsh Ltd has been appointed as insurance broker for some of the Group's UK and global policies and Mercer Marsh Benefits has been appointed as broker for the private medical healthcare scheme and life assurance scheme for the Company's UK based employees.

Mercer Kepler's total fees for the provision of remuneration services to the Committee in 2019 were £29,503 on the basis of time and materials, excluding expenses and VAT.

Shareholder voting at Annual General Meetings

The table below sets out the results of the most recent shareholder votes on the Policy Report and the advisory vote on the 2018 Annual Report on Remuneration at the 2019 AGM held on 13 June 2019.

Resolutions	Percentage of votes cast		Number of votes cast		
	For and discretion	Against	For and discretion	Against	Withheld ¹
Policy (2018 AGM)	84.57	15.43	1,996,614,738	364,296,668	193,523,679
2018 Annual Report on Remuneration	96.35	3.65	2,072,264,402	78,544,342	31,577,780

1. A vote withheld is not a vote in law and is not counted in the calculation of votes cast 'for' and 'against' a resolution.

2. The above resolutions were voted on a poll.



Single total figure of remuneration for Executive Directors (audited)

The remuneration received by Executive Directors in respect of the financial years ended 31 December 2019 and 31 December 2018 is set out below.

	Year	Salary & fees £	Pension £	Taxable Benefit ^(b) £	Total fixed £	Annual Bonus ^(c) £	LTIP £	Total variable £	Single Figure Remuneration Total £	Single Figure Remuneration US\$ ^(d)	
Executive Director											
	Pavel Maslovskiy ^(a)	2019	655,000	0	5,812	660,812	655,000	0	655,000	1,315,812	1,680,045
	Pavel Maslovskiy	2018	330,017	0	0	330,017	324,654	0	324,654	654,671	903,446

(a) Dr Pavel Maslovskiy was appointed as an Executive Director and Chief Executive Officer on 29 June 2018; the 2018 remuneration shown in the table relates to his appointment during the period 29 June 2018 to 31 December 2018.

(b) Taxable benefit is in respect of critical illness cover provided for Dr Maslovskiy.

(c) The value of the annual bonus (including deferred bonus shares) awarded in respect of the corresponding performance year.

(d) Converted from GBP to US\$ using the average exchange rate for the year (2019: £0.7832:US\$1, 2018: £0.7246:US\$1).

Directors' Remuneration Report continued

Implementation of the Remuneration Policy in 2019

Application of the Remuneration Policy in 2019

During 2019, Dr Pavel Maslovskiy, Chief Executive Officer was the sole Executive Director.

The following table summarises how the Policy was applied in 2019 for Dr Maslovskiy's remuneration and the components making up the report single figure on [page 167](#).

Element of remuneration	How it works	How it was implemented in 2019	CEO actual 2019 remuneration outcome (% change from 2018)
Salary	Generally expected that increases will be no higher than inflation.	No increase in 2019.	£655,000 (no change)
Benefits	To provide market competitive benefits.	Life assurance and critical illness cover provided.	£5,812
Pension	To provide market-competitive pension benefits in line with the wider workforce whilst ensuring no undefined liability for the Company.	No pension payments were made for Dr Maslovskiy. The provision of pension is in line with that of the Group's Russian based employees, whereby a statutory payment is made by the Company to the Russian government.	Nil (no change)
Annual Bonus	Payment of a maximum of 100% of salary. Performance is assessed against a range of strategically important measures which may vary each year depending upon the annual priorities of the Group. 50% deferred into shares for one year.	See page below table for details of the bonus scorecard and achievement against the specific targets	100% of maximum £655,000 (+1.625%)
Long-Term Incentive Plan	Performance Share Award of up to 100% of salary. Shares will vest 3 years from date of grant subject to satisfaction of performance targets. There will be an additional 2-year holding period.	Performance Share Award equal to 100% of salary awarded in June 2019. Please see page 169 for full details of performance targets.	N/A No performance share award was due to vest based on performance to 2019.

Annual bonus

For 2019, 100% of the annual bonus targets were aligned to the Board's strategy. The maximum bonus opportunity was 100% of salary, and target bonus was 50% of salary. The performance targets and actual achievement during the year, and the resulting bonus outcome, are set out in the table below.

Objective and weighting (% of max)	Link to our strategy	Target (pay-out of 50% of max)	Stretch (pay-out of 100% of max)	Achieved	Actual bonus outcome (% of max)
POX performance (50%)	Unlock the value creation potential of the POX Hub.	4-autoclaves commissioned in 2019.	Autoclaves achievement of 14,000 hours.	Total of 15,812 hours achieved.	50%
Resolution of US\$100 million 9% Convertible Bonds due 2020 (25%)	Strengthen the balance sheet and increase liquidity.	Refinancing of the Group's US\$100 million 9% Convertible Bonds Due 2020.		Convertible Bonds refinanced by the issue of the Group's US\$125 million 8.25% Convertible Bonds due 2024. (see page 23)	25%
Gold Production (20%)	Optimise costs and operational efficiencies.	Gold production of 460koz of doré.	Gold production =>483koz of doré.	517.3koz	20%
Health & Safety (5%)	Continuously improve HSE standards.	LTIFR target equal to 2018 actual LTIFR.	LTIFR target 5% or more improvement on 2018 performance (LTIFR equal or less than 2.14).	1.61	5%
Total					100%

Based on achievement of performance targets, the bonus outcome was 100% of maximum. The Committee reviewed the Company's underlying performance during the year and determined that no discretionary adjustment was required.

For 2019, half of the total bonus payable will be paid in cash and the remainder will be payable in the form of deferred bonus shares, subject to the approval of the new Long-Term Incentive Plan (the Plan under which the deferred bonus share awards are made).

The deferred award will vest after one year, subject to continued employment. Malus and clawback provisions apply, as appropriate.

LTIP awards made during 2019

In 2019, the Chief Executive Officer received an award under the LTIP of 100% of salary:

Date of grant	Number of shares granted	Share price on date of grant	Face value	Award as % of salary	Vesting date	Holding period expiry
24 June 2019	7,127,312	9.19 pence	£655,000	100%	24 June 2022	24 June 2024

1. The share price for calculating the awards was 9.19 pence, being the average middle market closing price of Petropavlovsk Ordinary Shares on the three dealing days immediately prior to the date the Awards were made in accordance with the LTIP Rules.

Vesting will be dependent on (i) three-year relative TSR from 1 January 2019 to 31 December 2021 against a bespoke gold mining index, weighted 70% of the award, and (ii) a balanced scorecard, weighted 30% of the award. Performance against the balanced scorecard measures will be assessed on a discretionary basis, and full disclosure of targets and actual performance will be provided on vesting; the key performance criteria for each measure are set out in the table.

Measure	Weighting (% of award)	Performance targets		
		Below threshold (0% vesting)	Threshold (25% vesting)	Stretch (100% vesting)
TSR vs. bespoke gold mining index ¹	70%	Below median	Median	Median +10% p.a.
Balanced scorecard	20%	– Construction and launch of a flotation plant at Pioneer.		
	5%	– Start of operations at the Elginskoye deposit.		
	5%	– Finalising a feasibility study of permanent conditions and ensuring the reserves are protected and recorded in the State Committee of Mineral Reserves.		
	5%	– Completion of technical documentation and commencement of construction of the 3rd phase of the Malomir flotation plant.		

1. The bespoke Gold Mining Index comprises of the following companies: Acacia Mining, Atlantic Gold Corporation, Centamin, Endeavour Mining Corporation, Highland Gold Mining, Perseus Mining, Polymetal International, Resolute Mining, Roxgold, Saracen Mineral, Silver Lake Resources.

Prior to determining the level of vesting, the Committee will also consider the underlying performance of the business, including whether there have been any material adverse events.

The award will vest three years from the grant date, subject to meeting the performance conditions and continued employment. Clawback and malus provisions apply, as appropriate. A mandatory two-year post-vesting holding period applies; vested awards may not be sold during the holding period except to cover tax liabilities.

Deferred bonus share awards made during 2019

In 2019, the Chief Executive Officer received an award under the 2018 bonus of 963,931 Ordinary Shares based on a share price of 8.42 pence on 1 May 2019. These Shares vested on 1 May 2020.

Directors' Remuneration Report continued

Single figure for Non-Executive Directors (audited)

The fees paid to Sir Roderic Lyne, Non-Executive Chair and to the Company's Non-Executive Directors in respect of the financial years ended 31 December 2019 and 31 December 2018 are as follows:

Non-Executive Directors	Total fees £		Total fees US\$ ⁸	
	2019	2018	2019	2018
Roderic Lyne ¹	150,000	75,577	191,520	104,296
James W. Cameron Jr ²	80,000	15,865	102,144	21,894
Damian Hackett ²	80,000	15,865	95,760	21,894
Robert Jenkins ³	123,000	42,827	157,046	59,101
Harry Kenyon-Slaney ⁴	83,151	11,346	108,720	15,658
Bektas Mukazhanov ⁵	46,667	32,115	59,584	44,319
Mirzaaziz Musakhanov ⁶	17,641	–	22,524	–
Charlotte Philipps ⁷	11,590	–	14,798	–
Katia Ray ⁷	11,590	–	14,798	–
Total	603,639	193,595	766,894	267,162

1. Sir Roderic Lyne was appointed as Non-Executive Chair on 29 June 2018.

2. Messrs James W. Cameron Jr and Damian Hackett were appointed as Independent Non-Executive Directors on 15 October 2018.

3. Mr Robert Jenkins was appointed as an Independent Non-Executive Director on 29 June 2018. Mr Jenkins acts as Chair of the Audit and Remuneration Committees. Mr Jenkins is entitled to a fee for acting as Chair of each Committee. Mr Jenkins did not accept a fee for his Chairing of the Remuneration Committee during the period 29 June 2018 to 31 December 2018. The Board approved a payment of £25,500 to Mr Jenkins in respect of the additional work undertaken in relation to the estimation and negotiation of Petropavlovsk's guarantee fee arrangements with IRC. This was agreed at a daily rate of £1,500.

4. Mr Harry Kenyon-Slaney was appointed as an Independent Non-Executive Director on 7 November 2018 and as Senior Independent Director on 24 April 2019.

5. Mr Mukazhanov was appointed as a Non-Executive Director on 8 February 2018 and departed as a Director on 8 June 2018, he was re-appointed as a Non-Executive Director on 27 July 2018. The remuneration shown for 2018 relates to the period from 27 July 2018 to 31 December 2018. Mr Mukazhanov did not receive any fee for his period as a Director of the Company from 8 February 2018 to 8 June 2018. Mr Mukazhanov resigned as a Director on 30 July 2019.

6. Mr Musakhanov was appointed as a Director on 14 October 2019.

7. Ms Charlotte Philipps and Mrs Katia Ray were appointed as Independent Non-Executive Directors on 8 November 2019.

8. Converted from GBP to US\$ using the average exchange rate for the year: (2019: £0.7832:US\$1, 2018: £0.7246:US\$1).

The Non-Executive Chair's fee for 2019 remained unchanged from 2018 levels. The Board approved an increase of c.6.7% in the fee payable to the Non-Executive Directors effective from 1 January 2019, from £75,000 to £80,000. This was the first time that fees had been reviewed since May 2015 when fees were reduced by c.18.5%. No increase was made to the additional fee for the Audit Committee or Remuneration Committee Chair or for the position of Senior Independent Director. A summary of the fees as at 1 January 2019 is set out below.

	Fees 2019
Non-Executive Chair fee	£150,000
Non-Executive Director base fee	£80,000
Additional Senior Independent Director fee	£7,500
Additional Audit Committee Chair fee	£10,000
Additional Remuneration Committee Chair fee	£7,500

Payments for loss of office and to past Directors (audited)

There were no payments made for loss of office during the year, and no payments to past Directors during the period in respect of services provided to the Company as a Director.

External directorships

Executive Directors may accept an external non-executive appointment with the approval of the Board. Any fees earned are retained by the executive. The Chief Executive Officer did not earn any remuneration from external non-executive appointments during the year.

Implementation of proposed Remuneration Policy in 2020

The section below sets out a summary of how the proposed Remuneration Policy will be implemented for the year ending 31 December 2020.

Executive Directors

Salary

The Committee reviewed the Chief Executive Officer's salary and determined that no increase should be awarded. His salary will remain £655,000. Mr Danila Kotlyarov was appointed as Chief Financial Officer on 1 February 2020 and as an Executive Director on 21 April 2020. His salary upon appointment as Chief Financial Officer was £500,000; this is subject to review on 1 January 2021.

Annual bonus

The maximum annual bonus opportunity for the Chief Executive Officer and Chief Financial Officer for 2020 will be 150% of salary, subject to the approval of the revised Policy at the 2020 AGM. Bonus pay-out at target will be 30% of max. The measures and weightings are set out in the table below.

Objective	Link to Strategy	CEO Weighting (% of max)	CFO Weighting (% of max)
Health and Safety, ESG (achievement of LTIFR performance targets)	Continuously improve sustainability practices	20%	15%
Improved Capital Structure (liquidity improvement and reduction of both leverage and cost of funding)	Strengthen the balance sheet and increase liquidity	40%	40%
Cost Reduction (achievement of TCC and AISC targets for non-refractory and refractory ore and mining and processing)	Optimise costs and operational efficiencies	15%	15%
Finance function transformation (development and implementation of plans to enhance business budgeting and reporting)	Optimise costs and operational efficiencies	10%	20%
Increased gold production (achievement of budgeted targets for own gold production and utilisation of POX Hub capacity)	Unlock the value creation potential of the POX Hub	15%	10%
	Total	100%	100%

The final annual bonus outcome will be determined with reference to the achievement of the performance targets set out in the table, subject to the Committee's broader assessment of overall Company performance, including the occurrence of any material adverse HSE event or an event which leads to significant reputational damage for the Company.

Full retrospective disclosure of the specific targets and performance against them will be provided in the 2020 Annual Report on Remuneration.

For 2020, one-third of the total bonus paid will be deferred in Company shares, vesting after three years subject to continued employment. Dividend equivalents may be accrued in respect of awards that vest. Malus and clawback provisions apply, as appropriate.

LTIP

The Committee intends to grant performance share awards following the AGM, subject to shareholders' approval of the new Long-Term Incentive Plan. It is intended that the Chief Executive Officer and the Chief Financial Officer will receive an award of 150% of salary, which will vest based upon the satisfaction of performance targets over a three-year performance period as set out below.

Measure	Weighting (% of award)	Performance targets		
		Below threshold (0% vesting)	Threshold (25% vesting)	Stretch (100% vesting)
TSR vs. bespoke gold mining index ¹	100%	Below median	Median	Median +10% p.a.

1. The bespoke Gold Mining Index comprises of the following companies: Atlantic Gold Corporation, Centamin, Endeavour Mining Corporation, Highland Gold Mining, Perseus Mining, Polymetal International, Resolute Mining, Roxgold, Sabine Gold Limited, Saracen Mineral, Silver Lake Resources.

Directors' Remuneration Report continued

Non-Executive Directors

The Non-Executive Chair and Non-Executive Director fees for 2020 have remained unchanged from 2019 levels. A summary of fees as at 1 January 2020 is set out below.

	Fees 2020
Non-Executive Chair fee	£150,000
Non-Executive Director base fee	£80,000
Additional Senior Independent Director fee	£7,500
Additional Audit Committee Chair fee	£10,000
Additional Remuneration Committee Chair fee	£7,500

Percentage change in remuneration of the Chief Executive Officer

The table below shows the percentage change in Chief Executive Officer remuneration from the prior year compared to the average percentage change in remuneration for Executive Committee members. Given that the Group operates in a number of diverse locations and its employees cover a wide remit of roles, the

majority of whom are operational employees based at the Group's producing mines in the Far East Amur region of Russia and also include geologists, technicians at the Group's laboratories and functional staff at the Group's offices in Blagoveschensk, Moscow and London, the Committee believes that using the Executive Committee as a subset for the purposes of comparing Chief Executive Officer pay against wider employee

pay provides a more useful and meaningful comparison than using pay data for all employees.

The minimum wage paid to employees of Petropavlovsk Group companies increased by 16.5% in 2019 compared to 2018, with the average wage increasing by 12% during the same period.

Item	Percentage change: 2019 vs. 2018	
	Chief Executive Officer ¹	Executive Committee
Base salary	5.2%	(2.7)%
Taxable benefits	N/A%	24.8%
Annual bonus	50% ²	(15.9)%

1. For 2018, based on the sum of remuneration paid to:
 – Mr Ermolenko from 1 January to 15 April;
 – Mr Roman Deniskin from 16 April to 28 June; and
 – Dr Pavel Maslovskiy from 29 June to 31 December.

2. Dr Maslovskiy's 2019 bonus was in respect of the period 1 January 2019 to 31 December 2019. Dr Maslovskiy's 2018 bonus was in respect of the period 29 June 2018 to 31 December 2018.

Relative importance of the spend on pay

The table below shows the movement in spend on staff costs between the 2019 and 2018 financial years, compared to profit before tax and dividends:

	2019	2018	% change
Staff costs	US\$103.7	US\$101.5	2.2%
Average number of staff	8,981	8,681	3.5%
Profit before tax	US\$76.3 million	US\$82.4 million	(7.3)%
Dividends	–	–	–

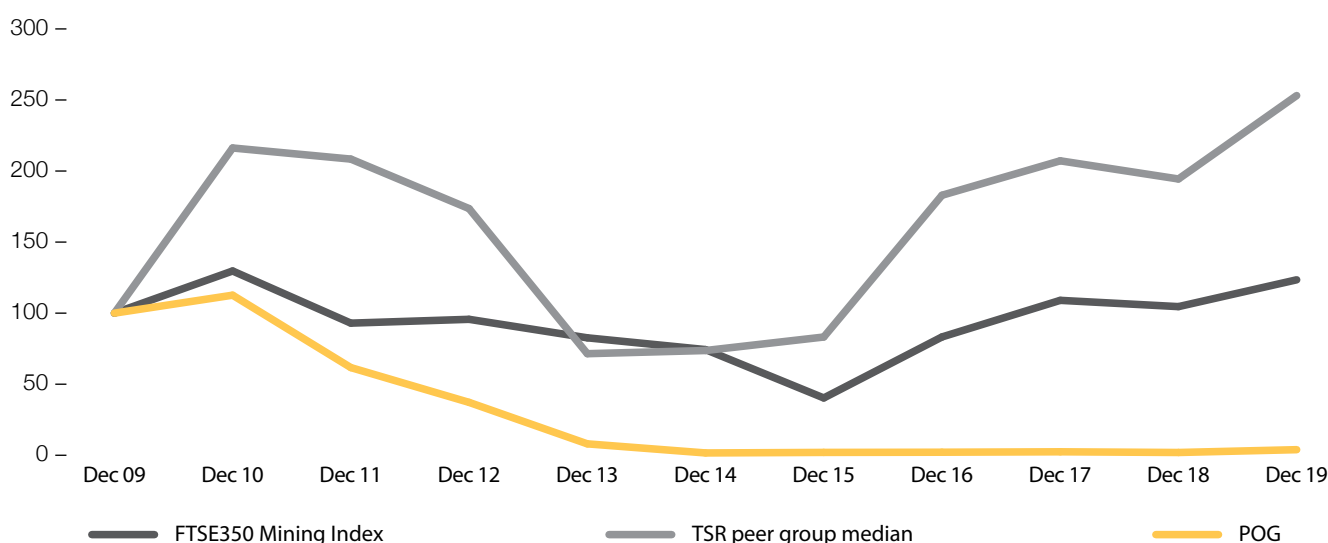
There were no dividends paid or declared during the years ended 31 December 2019 and 31 December 2018 and no share buy-backs were undertaken.

Total shareholder return

This graph shows the Company's TSR performance relative to the FTSE350 Mining Index and the bespoke Gold Mining Index over a period of ten years to 31 December 2019. The Board considers the FTSE350 Mining Index to be an appropriate index for comparison as the constituents represent the UK-listed mining sector. The bespoke Gold Mining Index is also considered an appropriate index for comparison purpose as this is the comparator group for Performance Share Awards made under the Company's Long-Term Incentive Plan.

£100 invested in Petropavlovsk, bespoke Gold Mining Index and FTSE350 Mining Index on 31 December 2009

£100 invested in Petropavlovsk, bespoke Gold Mining Index, and FTSE350 Mining Index on 31 Dec 2009



Chief Executive Officer Remuneration

The table below shows the single figure of total remuneration for the Chief Executive Officer during each of the last ten financial years.

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Chief Executive Officer during the year ^(a)			Mr Ermolenko	Mr Ermolenko/ Dr Maslovskiy			Dr Maslovskiy	Dr Maslovskiy/ Mr Ermolenko	Mr Ermolenko/ Mr Denisikin/ Dr Maslovskiy	Dr Maslovskiy
Total remuneration £	1,025,991	1,569,190	661,000	400,000	977,605	655,000	786,000	584,583	654,671	1,315,812
Annual bonus (%)	45%	94.4%	45.5%	0%	100%	0% ^(c)	20%	25%	98.4% ^(d)	100%
LTIP vesting (%)	0%	0%	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A

- a. Dr Pavel Maslovskiy resigned as Chief Executive Officer on 20 December 2011 and Mr Sergey Ermolenko was appointed as Chief Executive Officer on that date. Mr Ermolenko stepped down as Chief Executive officer on 5 November 2014 and Dr Maslovskiy was appointed as Chief Executive Officer on that date. Dr Maslovskiy resigned as Chief Executive Officer on 17 July 2017 and Mr Ermolenko was appointed as Interim Chief Executive Officer on 18 July 2017.
- b. Dr Maslovskiy also received a special bonus payment of £225,000 during the year ended 31 December 2009 in recognition of the services provided in relation to the Company's acquisition of Aricom plc and to the admission of the Company's shares to trading on the Main Market of the London Stock Exchange plc. The special bonus payment of £225,000 is included in the total remuneration for 2009 shown above but is not included in the annual bonus percentage figure shown of 70%.
- c. The formulaic outcome of the 2015 Annual Bonus Plan would have resulted in a bonus of 30% of basic salary. However, Dr Maslovskiy agreed that his bonus payment should be waived.
- d. Dr Maslovskiy received a bonus of 98.375% of his salary for the period 29 June 2018 to 31 December 2018.

Directors' Remuneration Report continued

Directors' shares and share plan interests

Directors' share interests

The interests of the Directors who held office during the period from 1 January 2019 to 31 December 2019 in the ordinary shares of the Company, together with details of changes to shareholdings between 1 January 2020 and 26 May 2020, are as set out in the table below.

Director	Shares held as at 1 January 2019 or date of appointment if later	Shares held as at 31 December 2019 or date of retirement if earlier	Shares held as at 26 May 2020
Current Directors:			
Sir Roderic Lyne	0	0	0
Dr Pavel Maslovskiy	0	17,400,000	17,400,000
Mr James W Cameron Jr	0	0	0
Mr Damien Hackett	0	0	0
Mr Robert Jenkins	0	250,000	250,000
Mr Bektas Mukazhanov ¹	1,192,406	1,192,406	N/A
Mr Mirzaaziz Musakhanov ²	0	0	0
Mr Harry Kenyon-Slaney	0	250,000	250,000
Ms Charlotte Philipps ³	N/A	0	0
Mrs Katia Ray ³	N/A	0	0
Mr Danila Kotlyarov ⁴	N/A	N/A	0
Mr Maxim Kharin ⁵	N/A	N/A	0

1. Resigned as a Non-Executive Director on 30 July 2019. These shares were beneficially owned by JSC Fincraft Investment House.

2. Appointed as a Non-Executive Director on 14 October 2019, resigned as a Director on 5 February 2020.

3. Appointed as an Independent Non-Executive Director on 8 November 2019.

4. Appointed as Chief Financial Officer on 1 February 2020 and as an Executive Director on 21 April 2020.

5. Appointed as a Non-Executive Director on 21 April 2020.

Outstanding share awards

Details of awards outstanding are detailed below.

Director	Date of award	At 1 January 2019	Granted during the year	Face value at grant	At 31 December 2019	Normal vesting date
Dr Pavel Maslovskiy	1 May 2019	-	963,931	£81,163	963,931	1 May 2020 ¹
Dr Pavel Maslovskiy	24 June 2019	-	7,127,312	£655,000	7,127,312	24 June 2022 ²

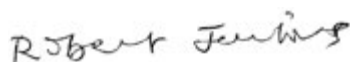
1. Dr Maslovskiy received a Deferred Bonus Award on 1 May 2019, under the rules of the Long-Term Incentive Plan. The award was in respect of c.12.4% of D Maslovskiy's salary, representing c.25% of the bonus received by Dr Maslovskiy in respect of the year ended 31 December 2018, as disclosed in the 2018 Directors' Remuneration report. This Award vested on 1 May 2020. It is proposed that these shares will be issued to the Petropavlovsk Employee Benefit Trust and transferred to Dr Maslovskiy following the release of the Company's results for the full year ended 31 December 2019.

The number of ordinary shares awarded was based on the mid-market closing share price of Petropavlovsk PLC ordinary shares on 30 April 2019, being 8.42 pence.

2. Dr Maslovskiy was granted a Performance Share Award on 24 June 2019. This Award will vest subject to the satisfaction of performance conditions detailed on page 169 over the three-year performance period. This will be followed by a two-year holding period.

Approval

The Annual Remuneration Report has been approved by the Board of Directors and signed on its behalf by:



Robert Jenkins

Chairman, Remuneration Committee

26 May 2020

Directors' Report

For the year ended 31 December 2019

Statutory and other information

This report includes certain disclosure which are required by law to be included in the Directors' Report.

In accordance with the Companies Act 2006, the following items have been reported in other sections of this Annual Report and are included in this Directors' Report by reference:

- The Strategic Report on pages [10](#) to [82](#) fulfils the requirements set out in section 414C of the Companies Act 2006 (the 'Act'). The statement describing how the Directors have had regard to the matters set out in Section 172(a) to (f) of the Act is provided on pages [24](#) to [25](#).
- The Directors' statement summarising how the directors have:
 - Had regard to the need to foster the Company's business relationships with

suppliers, customers and others, and the effect of that regard; and

- Engaged with its employees and have had regard to their interests, including on the principal decisions taken by the Company during the financial year is provided on pages [100](#) to [104](#).
- Details of significant events since the balance sheet date are contained in [note 31](#) to the financial statements.
- Details of the Group's approach to financial risk management, its objectives and policies and exposure to risk are described in notes [18](#) and [28](#) to the financial statements and in the Principal Risks and Mitigation section on pages [28](#) to [41](#).
- Information about the use of financial instruments by the Company and its subsidiaries is given in [note 28](#) to the financial statements.

- Details of the Group's corporate governance arrangements and its compliance with the UK Corporate Governance Code published in July 2018 (the 'Code') can be found on pages [134](#) to [141](#).
- Directors' interests in shares as at 31 December 2019 and any changes thereafter can be found on [page 174](#) of the Directors' Remuneration Report.
- The Group's disclosure of its greenhouse gas emissions can be found on [page 88](#).

Directors, Directors' appointment, conflict of interest and Directors' indemnity

The names and biographies of the Directors who held office at the date of this Annual Report are set out on pages [130](#) and [132](#).

Changes to the Directors during 2019 and up until the date of this Report are detailed in the table below:

Name	Appointed	Resigned	Position
Ms Charlotte Philipps	8 November 2019		Independent Non-Executive Director
Mrs Ekaterina (Katia) Ray	8 November 2019		Independent Non-Executive Director
Mr Mirzaaziz Musakhanov	14 October 2019	5 February 2020	Non-Executive Director
Mr Bektas Mukazhanov		30 July 2019	Non-Executive Director
Mr Maxim Kharin	21 April 2020		Non-Executive Director
Mr Danila Kotlyarov	21 April 2020		Executive Director & Chief Financial Officer

Further details of these changes are provided on pages [144](#) and [145](#) of the Corporate Governance Report.

Directors' appointment

With regard to the appointment and replacement of Directors, the Company is governed by its Articles of Association, the UK Corporate Governance Code, the Companies Act 2006, and related legislation. Directors may be appointed by the Company by ordinary resolution or by the Board, on recommendation of the Nominations Committee. A Director appointed by the Board holds office only until the following Annual General Meeting and is then eligible for election by shareholders. The Company may, in accordance with and subject to the provisions of the Companies Act 2006, by ordinary resolution of which special notice has been given, remove any Director before the expiration of his or her term of office.

In accordance with the requirements of the Code, all eligible directors will stand for election or re-election at the Company's 2020 Annual General Meeting. Information regarding the appointment of Directors is included in the Nominations Committee Report on pages [144](#) and [145](#).

Conflicts of interest

Under the Act, Directors are subject to a statutory duty to avoid a situation where they have, or can have, a direct or indirect interest that conflicts, or may possibly conflict, with the interests of the Company.

The Act allows directors of public companies to authorise conflicts and potential conflicts of interest of directors where the Articles of Association contain a provision to that effect. The Company's Articles of Association afford the Directors such powers. In addition, the Directors will be able to impose limits or conditions when giving any authorisation, if they think this is appropriate.

The Board has an established procedure for the disclosure of interests and other related matters. Each Director must promptly disclose actual or potential conflicts and any changes to the Board, which are noted at each Board meeting. The Board considers and authorises potential or actual conflicts as appropriate. Directors with a conflict do not participate in the discussion or vote on the matter in question.

The Directors have reviewed the interests declared by Directors which could conflict with those of the Company and are satisfied that the Board's power to authorise potential conflicts is operating effectively. Related party transactions, which includes those in respect of any Director, are disclosed in [note 26](#) to the financial statements on [page 236](#).

Directors' indemnities

A qualifying third-party indemnity provision as defined in Section 234 of the Act is in force for the benefit of the Directors in respect of liabilities incurred as a result of their office to the extent permitted by law. In respect of those liabilities for which Directors may not be indemnified, the Company maintained a directors' and officers' liability insurance policy throughout the financial year.

Powers of Directors

Subject to the Company's Articles of Association, the prevailing legislation and any directions given by special resolution, the business and affairs of the Company are managed by the Directors who may exercise all such powers of the Company. The powers of Directors are further described in the Schedule of Matters reserved for the Board, copies of which are available on the Company's website at www.petrodavlovsk.net.

Other statutory disclosures

Dividends

The Directors do not recommend a final dividend in respect of the year ended 31 December 2019 (2018: nil). Future decisions regarding the dividend will be based on a number of factors, including market conditions, distributable reserves, liquidity and operational performance. In any event, the payment of dividends by the Company is restricted by covenants in the Petropavlovsk 2016 Limited 8.125% Guaranteed Notes due 2022, and by covenants in the Petropavlovsk 2010 Limited 8.25% Convertible Bonds due 2024, both of which the Company is the guarantor.

Employees

The Group has an internal communications department to ensure that a regular and ongoing dialogue is maintained between employees, trade unions, management, local communities, the media and non-governmental organisations. This department also oversees the production of a free monthly newspaper designed to keep employees well informed with news from the Group's operations. In addition, regular meetings are held between management and employees to allow exchanges of information and ideas.

The Group is committed to providing equal opportunities and pay in all aspects of employment. The Group gives every consideration to applications for employment by disabled persons where the requirements of the job may be adequately filled by a disabled person. Where existing employees become disabled, it is the Group's policy wherever practicable to provide continuing employment under similar terms and conditions and to provide training, career development and promotion wherever appropriate.

Further information regarding employment at Petropavlovsk, the Board's engagement with the Group's employees, and how it has complied with Provision 5 of the Code, is provided in the Sustainable Development

Section of this Report on pages [100](#) to [104](#) and in the Corporate Governance Report on [page 134](#).

Modern Slavery and Human Trafficking Statement

The Company's statement is available in the Sustainability section of the Company's website at www.petrodavlovsk.net.

Donations

In line with the Group policy, no donations were made for political purposes.

Details of the Group's charitable activities are set out in the Sustainable Development Section of this Report on pages [106](#) to [108](#) and [page 236](#) of Consolidated Financial Statements.

Share capital and related matters

Share capital

At 31 December 2019, the Company had 3,310,210,281 ordinary shares of £0.01 each in issue (2018: 3,307,151,712). Details of the Company's issued share capital and movements in the issued share capital are shown in [note 24](#) to the financial statements on [page 234](#).

Purchase of own shares

Petrodavlovsk's Articles of Association provide the authority for the Company to purchase its own shares subject to compliance with any applicable requirements contained in the Act, the CREST regulations and any other applicable law.

The Company did not seek authority from shareholders to make purchases of its own shares at the Company's 2019 Annual General Meeting and no such authority will be sought in 2020.

Shareholders' rights

The rights attaching to the Ordinary Shares are governed by the Company's Articles of Association and prevailing legislation. There are no specific restrictions on the size of a holding.

Subject to applicable law and the Articles of Association, holders of Ordinary Shares are entitled to receive all shareholder documents, including notice of any general meeting; attend, speak and exercise voting rights at general meetings, either in person or by proxy; and participate in any distribution of income or capital.

Restrictions on voting

In general, there are no specific restrictions on a shareholder's ability to exercise their voting rights, save in situations where the Company is legally entitled to impose such restrictions (usually where amounts remain unpaid on the shares after request, or the shareholder is otherwise in default of an obligation to the Company). Currently, all issued Ordinary Shares are fully paid.

Deadlines for exercising voting rights

Votes are exercisable at a general meeting of the Company in respect of which the business being voted upon is being heard. Votes may be exercised in person, by proxy, or in relation to corporate members, by corporate representatives. The Articles of Association provide a deadline for submission of proxy forms of not less than 48 hours before the time appointed for the holding of the meeting or adjourned meeting.

Transfer of Ordinary Shares

The transfer of Ordinary Shares is governed by the general provisions of the Company's Articles of Association and prevailing legislation. There are no restrictions on the transfer of the Ordinary Shares other than (i) as set out in the Articles of Association; (ii) certain restrictions which may from time to time be imposed by laws and regulations (for example, insider trading laws); and (iii) pursuant to the Listing Rules of the Financial Conduct Authority and the Market Abuse Regulation whereby certain Directors, officers and employees of the Company require approval to deal in the Ordinary Shares in accordance with the Company's share dealing rules.

Allotment of Ordinary Shares and disapplication of pre-emption rights

The Company has authority to issue Ordinary Shares under its Articles of Association.

At the 2019 Annual General Meeting held on 13 June 2019, shareholders granted the Directors authority to allot new shares (or grant rights to subscribe for or convert securities into shares) up to a nominal value of £11,030,000, equivalent to approximately 33% of the total issued Ordinary Share capital of the Company, exclusive of treasury shares, at the time of passing the resolution.

On 3 July 2019, Petropavlovsk 2010 Limited (the 'Issuer'), a subsidiary of the Company, issued US\$125 million Guaranteed Convertible Bonds due 2024 (the 'New Bonds') convertible into preference shares of the Issuer (the 'Preference Shares') to be issued upon conversion of the New Bonds, such Preference Shares being immediately and mandatorily exchangeable for ordinary shares in the Company (the 'Ordinary Shares'). On 18 June 2019, the Directors authorised the allotment and issue of any Ordinary Shares arising from the conversion of the New Bonds, subject to and on the terms of the above authority granted at the Company's Annual General Meeting held on 13 June 2019.

At the 2019 Annual General Meeting the Company also sought shareholder approval of the resolution for disapplication of pre-emptive rights and the resolution for disapplication of pre-emptive rights (representing an additional 5%). These resolutions were not approved by shareholders. Further information on the actions taken by the Company in accordance with Provision 4 of the Code, including on the consultation with dissenting shareholders is provided on [page 142](#).

Resolutions seeking authority for the Directors to allot ordinary shares will be sought at the Company's 2020 Annual General Meeting.

Further details of the above proposals and resolutions will be contained in the 2020 Notice of Annual General Meeting.

Amendment of Articles of Association

The Company's Articles of Association may be amended by special resolution of shareholders. A copy of the Company's Articles of Association adopted by shareholders on 26 February 2015 are available on the Company's website.

A resolution to amend the Company's Articles of Association will be proposed at the Company's 2020 Annual General Meeting. Full details of the changes to be made will be provided in the Notice of Annual General Meeting. However, the revised Articles of Association, if approved by shareholders, will enable the Company to hold hybrid general meetings if the Board deems this appropriate.

2020 Annual General Meeting (AGM)

Notice of General Meeting

A separate document, the 2020 Notice of Annual General Meeting, convening the Annual General Meeting of the Company to be held on 30 June 2020, will be sent or made available to all shareholders and will contain an explanation of the resolutions to be proposed to that meeting. The Directors consider that each of the Resolutions is in the best interests of the Company and the shareholders as a whole and recommend that shareholders vote in favour of all Resolutions.

Electronic proxy voting

Registered shareholders may submit their votes (or abstain) on all Resolutions proposed at the AGM by means of an electronic voting facility operated by the Company's registrar, Link Asset Services. This facility can be accessed by visiting www.signalshares.com. CREST members may appoint a proxy or proxies by using the CREST electronic appointment service.

As detailed in the 2018 Annual Report, and in line with the Company's sustainability commitment, the Company will no longer be sending paper proxy cards to shareholders for the Annual General Meeting unless specifically asked to do so. Instead shareholders will be able to submit their proxy vote electronically by accessing the shareholder portal at www.signalshares.com. The Company will provide further advice in the 2020 Notice of Annual General Meeting on how to submit votes electronically and how shareholders can request a paper proxy if this is their preference.

Electronic copies of the annual report and financial statements and other publications

Copies of the 2019 Annual Report and Financial Statements, Notice of Annual General Meetings, other corporate publications, press releases and announcements are available on the Group's website at www.petropavlovsk.net. Shareholders are encouraged to take advantage of the provisions allowing the Group to deliver notices of meetings and associated documentation electronically by e-mail, or via the Group's investor relations webpages at www.petropavlovsk.net/investors.

Change of control (significant contracts)

A change of control of the Company following a takeover may cause agreements to which the Company, or any of its subsidiaries, is party, such as commercial trading contracts, joint venture agreements and banking arrangements, to take effect, alter or terminate. In the context of the potential impact on the Group, certain of these arrangements are considered to be significant.

The following significant agreements contain certain termination and other rights for the counterparties of the Group companies upon a change of control of the Company.

Pursuant to the issue of US\$500 million 8.125% Guaranteed Notes due 2022 (the 'Loan Notes') issued by Petropavlovsk 2016 Limited on 14 November 2017 and guaranteed by the Company, if any person or group of persons acting in concert gains control of the Company, constituting a Relevant Event (as defined in the Terms and Conditions of the Bonds), the bondholders have the right to require the redemption of the Loan Notes at 101 per cent. of their principal amount plus accrued and unpaid interest to the date of redemption.

Pursuant to the issue of US\$125 million 8.25% guaranteed Convertible Bonds due 2024 ('the Bonds') issued by Petropavlovsk 2010 Limited ('the Issuer') on 3 July 2019 and guaranteed by the Company, upon a change of control over the Company constituting a Relevant Event (as defined in the Terms and Conditions of the Bonds), the exchange price of the shares shall be adjusted in accordance with the formula contained in the Terms and Conditions of the Bonds and the bondholders have the right to require the redemption of the Bonds at their principal amount plus accrued and unpaid interest to the date of redemption.

Information required by UK Listing Rule 9.8.4

Details of the amount of interest capitalised by the Group during the financial year can be found in [note 9](#) to the financial statements on [page 222](#).

There are no other disclosures to be made under Listing Rule 9.8.4.

Directors' Report continued

Significant shareholdings

Information provided to the Company pursuant to the Financial Conduct Authority's Disclosure Guidance and Transparency Rules (DGTRs) is published on a Regulatory Information Service and on the Company's website.

As at 31 December 2019, the Company had received the following disclosures of major holdings of voting rights, pursuant to the requirements of Rule 5 of the DGTR.

	No of Shares	% interest in voting rights ordinary shares	Financial Instruments (Number of voting rights that may be acquired if the instrument is exercised/converted)	% voting Rights	Financial instruments with similar economic effect	% of voting rights	Total number of Voting rights	% voting rights (as at 31 December 2019)
Prosperity Capital Management Limited ^(a) :								
The Russian Prosperity Fund								
The Prosperity Cub Fund								
The Prosperity Quest Fund								
Prosperity Capital Management SICAV 2384908 Ontario Limited	504,028,725	15.23					504,028,725	15.23
Aeon Mining Limited ^(b)	440,565,485	13.30	300,000,000	9.06	210,370,370	5.97 (nominal)	740,565,485	28.33
VTB Bank (Deutschland) AG	300,000,000	9.06					300,000,000	9.06
Everest Alliance Limited (formerly known as CABS Platform Limited)	249,517,537	7.54					249,517,537	7.54
The Russian Prosperity Fund ^(a)	244,884,565	7.40					244,884,565	7.40
Fortiana Holdings Limited ^(c)	152,994,773	4.62					152,994,773	4.62
Slevin Ltd	150,517,537	4.55					150,517,537	4.55
Abu Dhabi Investment Authority	131,559,109	3.97					131,559,109	3.97
The Prosperity Quest Fund ^(a)	104,127,789	3.15					104,127,789	3.15
Norges Bank	89,963,383	2.72	45,000,000 ^(d)	1.36			134,963,383	4.08

(a) Prosperity Capital Management Limited's holding of 15.23% includes the disclosure of The Russian Prosperity Fund (7.40%) and The Prosperity Quest Fund (3.15%).

(b) Aeon Mining Limited is the holder of the voting rights and financial instruments in Petropavlovsk PLC as set out above. Aeon Mining Limited is a wholly owned subsidiary of Limited Liability Research and Production Association Altair, a company ultimately controlled by Mr Roman Trotsenko.

The interest in financial instruments with similar economic effect to qualifying financial instruments of Aeon Mining Limited relates to the Group's 8.25% Convertible Bonds due 2024 (the 'Bonds'). Bondholders cannot exercise their voting rights over Ordinary Shares associated with the Bonds until they have converted their Bonds into Ordinary Shares.

(c) The beneficial ownership of Fortiana Holdings Limited is exercised by entities owned by Vladislav Sviblov.

(d) The interest in financial instruments relates to shares acquired on loan (right to recall)

As at 26 May 2020, the Company has not received any notification that any other person holds 3% or more of the voting rights of the Company.

	No of Shares	% interest in voting rights ordinary shares	Financial Instruments (Number of voting rights that may be acquired if the instrument is exercised/ converted)	% voting Rights	Financial instruments with similar economic effect	% of voting rights	Total number of Voting rights	% voting rights (as at 26 May 2020)
Joint Stock Company "Uzhuralzoloto Group of Companies" ^(a)	740,565,485	22.37			210,370,370 ^(a)	5.97	950,935,855	28.34
Prosperity Capital Management Limited ^(b) : The Russian Prosperity Fund The Prosperity Cub Fund The Prosperity Quest Fund Prosperity Capital Management SICAV 2384908 Ontario Limited	494,796,575	14.95					494,796,575	14.95
Everest Alliance Limited (formerly known as CABS Platform Limited)	249,517,537	7.54					249,517,537	7.54
The Russian Prosperity Fund ^(b)	244,884,565	7.40					244,884,565	7.40
Fortiana Holdings Limited ^(c)	152,994,773	4.62					152,994,773	4.62
Slevin Ltd	150,517,537	4.55					150,517,537	4.55
The Prosperity Quest Fund ^(a)	104,127,789	3.15					104,127,789	3.15
Norges Bank	38,754,076	1.17	96,209,307 ^(e)	2.91			134,963,383	4.08
Societe Generale SA	18,455,115	0.56	108,429,907 ^(e)	3.28	4,065,911	0.12	130,950,933	3.96

(a) The interest in financial instruments with similar economic effect to qualifying financial instruments of Joint Stock Company "Uzhuralzoloto Group of Companies" relates to the Group's 8.25% Convertible Bonds due 2024 (the 'Bonds'). Bondholders cannot exercise their voting rights over Ordinary Shares associated with the Bonds until their Bonds are converted into Ordinary Shares.

(b) Prosperity Capital Management Limited's holding of 14.95% includes the disclosure of The Russian Prosperity Fund (7.40%) and The Prosperity Quest Fund (3.15%).

(c) The beneficial ownership of Fortiana Holdings Limited is exercised by entities owned by Vladislav Sviblov.

(d) The interest in financial instruments relates to shares acquired on loan (right to recall).

(e) The voting rights for 108,429,907 Ordinary Shares are in relation to Borrowed Ordinary Shares and 4,065,911 voting rights are in relation to the Contract for Difference.

The information provided in the above tables was correct at the date of notification. It should be noted that these holdings may have changed since the Company was notified. However, notification of any change is not required until the next notifiable threshold is crossed.

Relationship Agreements

On 30 July 2018, Fincraft Holdings Limited ('Fincraft') and Mr Kenges Rakishev entered into a relationship agreement with the Company (the 'Fincraft Relationship Agreement') due to Fincraft's position as a significant shareholder of the Company and Mr Rakishev being the sole beneficial owner of Fincraft. The Fincraft Relationship Agreement terminated on 27 June 2019 when Fincraft sold its shareholding in the Company to Aeon Mining Limited ("Aeon").

On 14 October 2019 Aeon and Mr Roman Trotsenko entered into a relationship agreement with the Company (the 'Aeon Relationship Agreement') due to Aeon's position as a significant shareholder of the Company and Mr Trotsenko being the ultimate sole beneficial owner of Aeon. The Aeon Relationship Agreement terminated on 4 February 2020 when Aeon sold its entire

shareholding in the Company to Uzhuralzoloto Group of Companies.

Under the Fincraft Relationship Agreement and the Aeon Relationship Agreement, Fincraft and Aeon respectively had the right to appoint a director to the board of the Company. Fincraft and Aeon also provided certain undertakings including in respect of conducting transactions with the Company and exercising their right to vote.

On 2 April 2020 Uzhuralzoloto Group of Companies and its ultimate beneficial owner entered into a relationship agreement with the Company (the 'UGC Relationship Agreement') due to Uzhuralzoloto's position as the largest shareholder of the Company.

Under the UGC Relationship Agreement, UGC has the right to appoint a director to the board of the Company. In this respect Mr Maxim Kharin was appointed as a Director

on 21 April 2020. UGC has also provided certain undertakings including in respect of conducting transactions with the Company and exercising their right to vote.

Accountability & Audit

Going concern

The Group monitors and manages its liquidity risk on an ongoing basis to ensure that it has access to sufficient funds to meet its obligations. Cash forecasts are prepared regularly based on a number of inputs including, but not limited to, forecast commodity prices and the impact of hedging arrangements, the Group's mining plan, forecast expenditure and debt repayment schedules. Sensitivities are run for different scenarios including, but not limited to, changes in commodity prices, cost inflation, different production rates from the Group's producing assets and the timing of expenditure on development projects.

This is done to identify risks to liquidity and enable management to develop appropriate and timely mitigation strategies. The Group meets its capital requirements through a combination of sources including cash generated from operations, advances received from customers under prepayment arrangements and external debt.

The Group performed an assessment of the forecast cash flows for the period of at least 12 months from the date of approval of the 2019 Annual Report and Accounts. As at 31 December 2019, the Group had sufficient liquidity headroom. The Group is also satisfied that it has sufficient headroom under a base case scenario for the period to June 2021. The Group has also performed projections under a layered stressed case that is based on a gold price, which is approximately 10% lower than the upper quartile of the average of the market consensus forecasts, processing of third-party concentrate through POX facilities is approximately 10% lower than projected and oxide gold production from underground operations at Pioneer and Malomir approximately 10% lower than projected, and Russian Rouble : US Dollar exchange rate that is approximately 10% stronger than the average of the market consensus forecasts. This layered stressed case indicates sufficient liquidity for a period of at least 12 months including under downside IRC performance scenarios.

As at 31 December 2019, the Group has guaranteed the outstanding amounts IRC owed to Gazprombank. The outstanding loan principal was US\$225 million as at 31 December 2019 and the facility is subject to an initial US\$160 million guarantee by the Group (see [note 26](#)). The assessment of whether there is any material uncertainty that IRC will be able to repay this facility as it falls due is another key element of the Group's overall going concern assessment. IRC projections demonstrate that IRC expects to have sufficient liquidity over the next 12 months and expects to meet its obligations under the Gazprombank Facility. If a missed repayment under debt or guarantee obligations occurs which, if not remedied by the Group, would result in events of default which, through cross-defaults and cross-accelerations, could cause all other Group's debt arrangements to become repayable on demand.

The directors have also considered the potential impacts of COVID-19 which are described in detail on pages [6](#), [30](#) and [31](#) of the Annual Report.

Having taken into account the aforementioned factors, and after making enquiries and considering the uncertainties described above, the Directors have a reasonable expectation that the Group will have adequate resources to continue in operational existence for the foreseeable future, being at least the next 12 months from the date of approval of the 2019 Annual Report and Accounts. Accordingly, they continue to adopt the going concern basis of accounting in preparing these consolidated financial statements.

Viability Statement

In accordance with provision C.2.2 of the 2016 UK Corporate Governance Code, the Directors have assessed the longer-term prospects of the Group over a period significantly longer than 12 months in the Going Concern Statement and have determined an appropriate period for assessment in this Viability Statement. In doing so, they have considered, in particular:

- The nature of the Group's business, strategy and business model;
- The Group's current financial and projected liquidity positions, based on its current Net debt and available debt facilities and its projected performance; and
- The principal risks which could affect these and the Group's longer-term viability.

Assessment of prospects

The Directors have assessed the prospects of the Group in the context of the factors central to its success in realising its strategic objectives. They have considered these in the context of the Group's Long-Term Mining Plan, with requirement for the sustainability alignment of its business model. The assessment of the Group's longer-term prospects has also taken into account, in particular, its cash and debt finance position at end 2019, and projected ability to generate sufficient cash flow to meet its projected capital expenditure and working capital requirements as well as to service and repay, if necessary, its existing debt finance over the medium-term.

The assessment of the Group's longer-term prospects has additionally taken into account macroeconomic and financial markets conditions, both globally and in relation to Russia, in particular as these may affect both the gold price and the competitiveness of the Group's Russia based business operations.

The Group undertakes annually a strategic review of its Long-Term Mining Plan as the basis for its business planning process. This includes evaluation of the robustness of the Group's assumptions about projected gold production, including in the processing of third-party gold concentrate and its availability on satisfactory terms, corresponding projected Total Cash Costs and All-in Sustaining Costs. The Group undertakes this evaluation also by reference to its gold reserves and resources as well as geological, metallurgical, operational and other technical actual and potential risk factors, including of a capital expenditure and project related nature, as these could affect its gold production.

Based on this assessment, the Board considers the Group's gold production and associated cost projections to be robust and, taking due account of external gold market and exchange rate risk factors, concludes that its longer-term prospects are satisfactorily good.

Viability period

The Directors have reviewed the period used for the assessment and determined that a five-year period to be appropriate. This period aligns the Viability Statement with the tenor of the Group's existing debt finance obligations and the possible requirement, in the absence of refinancing and other options for this, to repay the Group's existing US\$500 million Loan Notes in November 2022 and US\$125 million Convertible Bonds in June 2024. Accordingly, the Group's longer-term viability assessment and corresponding financial projections stress test model the Group's ability to meet its debt finance obligations. This is on the basis of its projected cash generation liquidity, taking into account also existing forward gold sale financing facilities available to it.

Principal risks

The Board attaches great importance to risk management, and this is reflected in its creation of a newly established Risk Committee. The role of the Risk Committee is to determine the processes by which the Group identifies risks, decides upon its appetite for risk and manages risks in their mitigation. In monitoring the Group's risk management, the Risk Committee engages with both the Audit Committee and the Safety, Sustainability and Workforce Committee in fulfilling this role and its membership includes a senior management representative. This has provided the context for the Directors' assessment of principal risks. The Board's detailed assessment of the identified principal risks and uncertainties relating to the Group is set out on pages 26 and 27 of this Annual Report.

In its assessment of risks relevant to the Group's longer-term viability, the Directors have given consideration to potential emerging risks which could affect this.

The Directors have reviewed internal operational related risks, as they might individually or together affect the Group's longer-term viability. They view these risks, highlighted at the end of this Viability Statement, as largely within management control, including those which are environmental, social and governance (ESG) related. As a result, the Directors consider them to be sufficiently remote so as not to affect the Group's viability over the longer-term.

The Directors have also reviewed external risks largely outside management's control. These include the possible risk of IRC not meeting its debt service obligations under its Gazprombank loan facilities and, in connection with its guarantees of this, the Group consequently having to provide financial support to IRC. Consideration of this has included review of a severe but plausible downside case scenario regarding IRC's future performance. This assessment shows that in the event of, the Group needing to provide financial support to IRC, this should not affect the Group's longer-term viability. It also does not take into account the possibility of a removal of Petropavlovsk's guarantees in due course resulting from a disposal of its shareholding in IRC or otherwise.

The Board has additionally considered the actual and potential COVID-19 related external risk consequences for both the Group and IRC. Based on current information as available, this has been assessed as possibly having some limited disruption effect in the short term, but no major disruption consequences or risks in the longer-term.

Catastrophic events, which could potentially result in long disruption to mining related operations, are regarded as principal risks. The causes of these could be both external (e.g. torrential floods affecting mining operations) and internal, and therefore amenable to management control (e.g. accident emergencies relating to the operation of the Group's POX Hub). In considering these, the Directors have concluded the likelihood of their occurrence to be remote and have therefore not taken them into account for the purposes of the Group's Viability Statement.

In identifying emerging principal risks that affect the Group's viability, the Board has additionally considered the actual and potential COVID-19 related risk consequences for both the Group and IRC. Based on current information as available, this has been assessed as possibly having some limited disruption effect in the short term, but no major disruption consequences or risks in the longer-term.

Based on this assessment, the Directors have concluded that the principal risks which could affect the Group's longer-term viability comprise the external risks relating to the gold price and exchange rate. These take account of inherent significant volatility which could affect these.

The Group's corporate planning process for gauging the possible consequences and of the relevant risks and uncertainties includes financial modelling to stress test the robustness of the Group's business model and projections under severe but plausible Reasonable Worst Case (RWC) and mitigated scenarios.

Key assumptions

The assessment of the Group's longer-term viability has taken into consideration its financially modelled Base Case, RWC and Mitigated RWC Scenarios, which management has prepared by reference to the Group's Long-Term Mining Plan.

The Group's Base Case Scenario financial projections reflect the following key assumptions:

- Existing JORC gold reserves and resources;
- Operational production capacity as projected in the Group's Long-Term Mining Plan, including planned capital expenditure for its mining operations and increased processing capacity for producing gold concentrate;
- The Group's current operational costs continuing to apply;
- An exchange rate of RUB74 : US\$1; and
- A gold price of US\$ 1,550/oz.

Assessment of viability

In order to assess resilience to principal risks that could threaten viability in severe but plausible scenarios, the Group's Base Case financial the model was subjected to stress test financial modelling analysis, including in an RWC Scenario, together with an assessment of potential mitigating actions in a Mitigated RWC Scenario.

The RWC and Mitigated RWC Scenarios financial projections assume, throughout the Viability Statement period, a 10% Rouble appreciation, applying a RUB66.60 : US\$1 exchange rate, and a US\$1,400 / oz gold price. They additionally make some specific provision for COVID-19 production related risks in 2020:

- Delay of Pioneer flotation plant commissioning until October 2020;
- A 10% reduction of third-party concentrate volumes;
- A 10% reduction in gold produced from underground operations; and
- A COVID-19 specific 10% downward adjustment in other production.

The mitigating actions applied in the Group's Mitigated RWC Scenario principally comprise assumed access to debt finance of up to US\$200 million for the repayment in full of the Group's existing US\$500 million Loan Notes in 2022, as well as additional US\$126 million forward gold sale funding. Assumed mitigating actions also include some partial gold price and exchange rate hedging.

In order to stress test whether the Group would be able to refinance its existing debt finance in 2022 and 2024 as necessary, additional sensitivity analyses have been undertaken at gold prices ranging down to US\$1,200/oz and Rouble appreciation ranging up to a RUB62 : US\$1 exchange rate, applied throughout the viability period. The purpose of this sensitivity analysis stress test is to assess whether, at such gold price and exchange rate levels, the Group's corresponding projected and cash flow generation would be sufficient to support the level of debt financing that would be required to refinance the Group's existing debt finance.

Liquidity and solvency

The Group's Base Case, RWC and Mitigated RWC Scenarios indicate, by reference to the corresponding projected operating profitability and cash generation over the viability period under these scenarios, that the Group should have a capacity to refinance, on a debt funding basis, the resulting projected liquidity requirement for repaying its existing US\$500 million Loan Notes in 2022 and US\$125 million Convertible Bonds in 2024. The sensitivity analyses undertaken at gold prices ranging down to US\$1,200/oz and Rouble appreciation ranging up to a RUB62 : US\$1 exchange rate, as applied throughout the viability period, further indicate that the Group should be able to refinance as necessary its existing debt finance in 2022 and 2024. This is by reference to the Group's corresponding projected operating profitability and cash generation. However, it should be highlighted that a key assumption under its stress tested RWC and sensitised scenarios, which the Directors consider reasonable, is that the Group will have access to debt finance for refinancing its existing borrowings as may be required to a partial extent. It can also be noted that this does not take account of either possible new equity capital or other refinancing options which the Group may have at such stage.

Expectations

In assessing the Group's longer-term viability, the Directors considered, as indicated, the principal risks that could affect this and the corresponding severe but plausible scenarios that have been financially modelled for these purposes. These have stress tested the robustness of the Group's Long-Term Mining Plan and its projected ability, under corresponding RWC and sensitised scenarios, to meet its existing debt financing obligations to 2024, generating sufficient cash flow as well as arranging such refinancing as may be necessary for these purposes. On the basis of this assessment, the Directors have concluded and have a reasonable expectation that the Group will be able to continue business operations, in line with its future plans, and to meet its obligations as they fall due during the five-year period covered by this Viability Statement.

Information to the independent auditors

The Directors who held office at the date of this Directors' Report confirm that, so far as they are each aware, there is no relevant audit information of which the Company's auditor is unaware, and that each Director has taken all steps that he ought to have taken as a Director to make himself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

Resolution to appoint independent auditors

Following the conclusion of a formal tender process led by the Audit Committee, as detailed on pages [146](#) to [154](#), the Directors recommend the appointment of PricewaterhouseCoopers LLP as auditor. A resolution to approve their appointment as auditor to hold office from, and including the year ending 31 December 2020 until the next meeting at which accounts are laid will be proposed at the forthcoming Annual General Meeting.

Fair, balanced and understandable

The Directors consider that this Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Company's position and performance, business model and strategy.

This report was approved by the Board of Directors of Petropavlovsk PLC on 26 May 2020 and signed on its behalf by:



Amanda Whalley ACIS

Company Secretary

26 May 2020

Directors' responsibilities statement

Directors' responsibilities statement

The directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations.

Company law requires the directors to prepare financial statements for each financial year. Under that law the directors are required to prepare the group financial statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and Article 4 of the IAS Regulation and have elected to prepare the parent company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law), including FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland". Under company law the directors must not approve the accounts unless they are satisfied that they give a true and fair view of the state of affairs of the company and of the profit or loss of the company for that period.

In preparing the parent company financial statements, the directors are required to:

- Select suitable accounting policies and then apply them consistently;
- Make judgments and accounting estimates that are reasonable and prudent;
- State whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and

This responsibility statement was approved by the board of directors on 26 May 2020 and is signed on its behalf by:



Sir Roderic Lyne
Non-Executive Chairman
26 May 2020

- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business.

In preparing the group financial statements, International Accounting Standard 1 requires that directors:

- Properly select and apply accounting policies;
- Present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- Provide additional disclosures when compliance with the specific requirements in IFRSs are insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- Make an assessment of the company's ability to continue as a going concern.

The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.



Dr Pavel Maslovskiy
Chief Executive Officer
26 May 2020

The directors are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors' Responsibility statement

We confirm that to the best of our knowledge:

- The financial statements, prepared in accordance with the relevant financial reporting framework, give a true and fair view of the assets, liabilities, financial position and profit or loss of the company and the undertakings included in the consolidation taken as a whole;
- The Strategic Report includes a fair review of the development and performance of the business and the position of the company and the undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and
- The Annual Report and financial statements, taken as a whole, are fair, balanced and understandable and provide the information necessary for shareholders to assess the company's position and performance, business model and strategy.

Independent Auditor's Report to the Members of Petropavlovsk PLC

Report on the audit of the financial statements

1. Opinion

In our opinion:

- The financial statements of Petropavlovsk plc (the 'parent company') and its subsidiaries (the 'Group') give a true and fair view of the state of the Group's and of the parent company's affairs as at 31 December 2019 and of the Group's profit for the year then ended;
- The Group financial statements have been properly prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union;
- The parent company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice, including Financial Reporting Standard 101 "Reduced Disclosure Framework"; and
- The financial statements have been prepared in accordance with the requirements of the Companies Act 2006 and, as regards the Group financial statements, Article 4 of the IAS Regulation.

We have audited the financial statements which comprise:

- The Consolidated Statement of Profit or Loss;
- The Consolidated Statement of Comprehensive Income;
- The Consolidated and Company Statements of Financial Position;
- The Consolidated and Company Statements of Changes in Equity;
- The Consolidated Statement of Cash Flows;
- The related notes 1 to 34 to the Consolidated Financial Statements; and
- The related notes 1 to 11 to the Company Financial Statements.

The financial reporting framework that has been applied in the preparation of the Group financial statements is applicable law and IFRSs as adopted by the European Union. The financial reporting framework that has been applied in the preparation of the parent company financial statements is applicable law and United Kingdom Accounting Standards, including FRS 101 "Reduced Disclosure Framework" (United Kingdom Generally Accepted Accounting Practice).

2. 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 are independent of the Group and the parent company in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the Financial Reporting Council's (the 'FRC's') Ethical Standard as applied to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We confirm that the non-audit services prohibited by the FRC's Ethical Standard were not provided to the Group or the parent company.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

3. Summary of our audit approach

Key audit matters

The key audit matters that we identified in the current year were:

- Impairment of property, plant and equipment;
- Valuation of the IRC investment;
- Valuation of the IRC guarantee; and
- Deferred taxation.

Materiality

The materiality that we used for the Group financial statements was \$9.0 million which was determined on the basis of net assets.

Scoping

Our Group audit included a full scope audit of all operating mines and specified audit procedures in relation to certain exploration assets, cost of sales and inventory balances; and service entities. Our full scope and specified audit procedures covered 88% of the Group's net assets and 93% of revenue.

Significant changes in our approach

Our assessment of the Group's key audit matters is consistent with 2018, with the exception of going concern that we no longer deem to be a key audit matter. This is on the basis of the macro-environment favourable gold pricing and relevant foreign exchange rate changes, which are partly driven by the impact of COVID-19, plus the re-financing and other business planning steps undertaken by the Group.

There were no significant changes in our audit approach, except for the changes in key audit matters.

4. Conclusions relating to going concern, principal risks and viability statement

4.1. Going concern

We have reviewed the directors' statement in Note 2 to the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them and their identification of any material uncertainties to the Group's and company's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements.

We considered as part of our risk assessment the nature of the Group, its business model and related risks including where relevant the impact of the COVID-19 pandemic and Brexit, the requirements of the applicable financial reporting framework and the system of internal control. We evaluated the directors' assessment of the Group's ability to continue as a going concern, including challenging the underlying data and key assumptions used to make the assessment, and evaluated the directors' plans for future actions in relation to their going concern assessment.

We are required to state whether we have anything material to add or draw attention to in relation to that statement required by Listing Rule 9.8.6R(3) and report if the statement is materially inconsistent with our knowledge obtained in the audit.

Going concern is the basis of preparation of the financial statements that assumes an entity will remain in operation for a period of at least 12 months from the date of approval of the financial statements.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

4.2. Principal risks and viability statement

Based solely on reading the directors' statements and considering whether they were consistent with the knowledge we obtained in the course of the audit, including the knowledge obtained in the evaluation of the directors' assessment of the Group's and the company's ability to continue as a going concern, we are required to state whether we have anything material to add or draw attention to in relation to:

- The disclosures on pages 26 to 41 that describe the principal risks, procedures to identify emerging risks, and an explanation of how these are being managed or mitigated;
- The directors' confirmation on page 180 that they have carried out a robust assessment of the principal and emerging risks facing the Group, including those that would threaten its business model, future performance, solvency or liquidity; or
- The directors' explanation on page 180 as to how they have assessed the prospects of the Group, over what period they have done so and why they consider that period to be appropriate, and their statement as to whether they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the period of their assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

We are also required to report whether the directors' statement relating to the prospects of the Group required by Listing Rule 9.8.6R (3) is materially inconsistent with our knowledge obtained in the audit.

Viability means the ability of the Group to continue over the time horizon considered appropriate by the directors.

We confirm that we have nothing material to report, add or draw attention to in respect of these matters.

Independent Auditor's Report continued

5. 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. These matters included 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.

5.1. Impairment of property, plant and equipment

Key audit matter description

The Group performed a review of its three cash generating units ("CGUs") for impairment and impairment reversal indicators as at 31 December 2019. In light of higher gold prices and a lower discount rate, management concluded that impairment reversal indicators existed at the Pioneer CGU.

The Group total carrying value of property, plant and equipment ("PP&E") as at 31 December 2019 was \$1,209.8 million (2018: \$1,144.1 million), after recognising the full \$53 million of available impairment reversal at Pioneer (and related corporate assets). At the 2018 year end, \$102 million of full impairment reversals were recognised at the Malomir and Albyn CGUs, meaning there are no further impairment reversals available across the Group's mining operations.

Determining the recoverable amount for the Group's CGUs requires management to make significant judgements, in particular regarding the key assumptions of forecast gold prices, production volumes, reserves and resources in mine plans, cash costs and foreign exchange rates (a key driver of operating costs), operational risks in securing and processing third-party concentrates, and the 7.0% post-tax real discount rate applied.

Please refer to [note 6](#) to the Group financial statements and the Audit Committee report on [page 150](#) for further details.

How the scope of our audit responded to the key audit matter

We challenged management's recoverable amount estimates and decision to recognise the above impairment reversal, by:

- Obtaining an understanding of the relevant controls, including management review controls, around the mine planning and forecasting process and the impairment valuation;
- Challenging management's determination that the mining and processing operations comprise three CGUs, by assessing whether the cash inflows are separately identifiable and independent; plus an assessment of whether the gold concentrate market is active, including thorough independent research, consistency with the Group's historical decision making, review of its concentrate contractual arrangements and future plans;
- Benchmarking management's gold price forecasts against independent analyst forecasts and foreign exchange rates against third-party data;
- Performed site visits, involving our mining specialists, to all three of the Group's mining operations to independently challenge the production volumes, mine plans, the reserves and resources, cash costs and the modelling of the operational risks in the cash flows;
- Involving our valuation specialists to benchmark the 7.0% post-tax real discount rate;
- Testing the mechanical accuracy of management's cash flow model;
- Assessing management's historical forecasting accuracy;
- Evaluating the sensitivity analysis performed by management and performing our own; and
- Evaluating the key accounting judgement and critical accounting estimate disclosures.

Key observations

We consider that the assumptions made by management in determining the CGU recoverable value are overall within the reasonable range; and that the carrying value of PP&E and impairment reversal recognised are appropriate

5.2. Valuation of the IRC investment

Key audit matter description

The Group's 31.1% equity accounted interest in IRC Limited ("IRC"), a Hong-Kong listed iron ore producer, had a carrying value of \$48.7 million as at 31 December 2019 (2018: \$85.1 million) after recognition of a \$23.3 million (2018: \$5.7 million) impairment write down.

Management determined that the decline in IRC's share price in the second half of 2019; and the preliminary announcement made on 18 March 2020 that the Group had entered into a conditional disposal agreement for 29.9% of its 31.1% interest in IRC (for \$10 million of consideration, plus release of the Group's guarantee over IRC's borrowings, which is a significant discount to the pre-impairment carrying value), represented impairment indicators as at 31 December 2019.

The investment was not considered to be an asset held for sale under IFRS 5 Non-current Assets Held for Sale and Discontinued Operations as at the balance sheet date and management therefore estimated the recoverable amount of its interest on a value in use basis, concluding that impairment was required for 2019.

Determining the value in use for the Group's investment in IRC requires management to make significant judgements in determining appropriate cash flow forecast assumptions and in assessing the underlying impairment valuations performed by IRC management, noting no underlying PP&E impairment or reversal was recognised by IRC in 2019 (2018: \$90.5 million underlying IRC impairment reversal, Group share: \$28.1 million).

The key assumptions applied in the valuation were the iron ore price, IRC production volumes and foreign exchange rate forecasts over the lifetime of the operations, the relevant IRC book value to Group equity value adjustments and the discount rate.

Please refer to [note 14](#) to the Group financial statements and the Audit Committee report on [page 151](#) for further details.

How the scope of our audit responded to the key audit matter

We challenged management's impairment valuation and accounting judgements by:

- Obtaining an understanding of the relevant key controls over the valuation of the Group's associate, based on the information available to the Group from IRC;
- Challenging the key underlying IRC PP&E impairment valuation assumptions, in particular in relation to the iron ore price assumptions, life of mine production forecasts, foreign exchange assumptions and the discount rate;
- This involved our own independent assumption benchmarking procedures, including comparison of the forecast iron ore price to latest third-party analyst data; comparison to third-party documentation where available; and the calculation of a reasonable discount rate range, including involving our valuation specialists;
- Understanding and challenging the key operational risks and production forecasts;
- Challenging management's methodology for determining the key IRC to Group level valuation adjustments;
- Assessing management's conclusion that that disposal transition was not highly probable at the balance sheet date based on the underlying facts and circumstances;
- Assessing the commercial rationale for the disposal price agreed and whether the valuation assumptions used were reasonable in light of the contradictory evidence related to the lower disposal price preliminary announcement;
- Reviewing whether the non-adjusting post balance sheet IRC disposal announcement was appropriately disclosed, explaining that if the disposal completes, a material loss on disposal would be realised in future periods; and
- Challenging the appropriateness of the key estimation disclosures and critical accounting disclosures.

Key observations

We consider that the carrying value of the Group's investment in IRC is within the reasonable range.

5.3. Valuation of the IRC guarantee

Key audit matter description

The Group originally provided a guarantee over IRC's \$340 million debt with ICBC in 2010 when IRC was a subsidiary of the Group and received a fee income based on a percentage of the guaranteed amount. During 2018 the Group provided two bridging loans, for a total of \$57 million, to IRC in order to enable IRC to make scheduled repayments to ICBC, and avoid a potential default.

In March 2019, IRC completed a re-financing of its outstanding \$169 million borrowings from ICBC, as well as the \$57 million of bridging loans, through a new \$240 million borrowing facility with Gazprombank ("GPB"). The Group guaranteed IRC's new \$240 million GPB facility.

The accounting and valuation for the new guarantee and associated guarantee fee income asset is complex. Management engaged third-party external valuation experts to determine the appropriate accounting treatment and a valuation of the guarantee liability and the credit provision for the fee income asset as at 31 December 2019. The de-recognition of the former ICBC guarantee and recognition of the Gazprombank guarantee resulted in a \$28.5 million net accounting gain for 2019.

The determination of the Group's \$8.9 million (2018: \$37.4 million) guarantee liability as at 31 December 2019 relies upon the critical judgement as to whether there has been a significant increase in IRC's credit risk from March 2019 to December 2019. This incorporates consideration of whether the \$23.3 million impairment of the Group's investment in IRC is indicative of such an increase in credit risk. Management have determined that there has not been a significant increase in credit risk since March 2019 and therefore the guarantee liability is measured as a 12 month Expected Credit Loss ("ECL"). This is in contrast to the former ICBC guarantee which was measured as a lifetime ECL as there had previously been a significant increase in credit risk for that guarantee since 2010. This difference in risk credit measurement has resulted in the \$28.5 million net accounting gain.

The estimation of the 12 month ECL for the guarantee liability and the credit provision for the associated guarantee fee asset is dependent on complex valuation techniques and inputs including: the IRC expected credit default loss (for which there are no directly observable inputs), the loss given default, the determination of the Group's total potential IRC liability exposure; and the inclusion of the Group's own credit default risk.

Please refer to [note 26](#) to the Group financial statements and the Audit Committee report on [page 152](#) for further details.

How the scope of our audit responded to the key audit matter

We challenged management's assumptions and conclusions reached in accounting for and valuing the associated financial instruments by:

- Obtaining an understanding of the relevant controls over the valuation of the IRC guarantee;
- Independently reviewing and challenging the accounting treatment and accounting policy adopted, including involving our financial instrument technical specialists;
- Assessing the competence, capability, objectivity and the scope of work performed by management's third-party valuation expert engaged to perform these valuations. We reviewed management's third-party expert's valuation work engagement letter and involved our own valuation specialists to review the scope of their work;
- Obtaining the third-party valuation expert's reporting to management; and challenging the methodologies used, the assumptions applied against third-party data and external benchmarks where relevant, and the application of the accounting standards. This included a number of joint meetings between the audit team, involving our audit valuation specialists where relevant, management's valuation expert and management;
- Independently checking the source information used by management's third-party expert and benchmarking key assumptions applied in the valuations to third-party market data where available;
- Performing independent re-calculations of certain key valuation workings in order to benchmark the output of the valuation models;
- Evaluating the appropriateness of whether the liability should be recognised under Stage 1, 2 or 3 of the IFRS 9 ECL model (in effect to determine whether use of a 12 month ECL or lifetime ECL was appropriate);
- Evaluating whether the impairment of the Group's IRC investment and underlying cashflows are indicative of a significant increase in credit risk by challenging the revised forecasts and covenant compliance; including through our discussions with management's valuation expert.
- Involving our audit valuation specialists to corroborate the impact of the impairment on the valuation of the liability and to assess the impact on IRC's shadow credit rating. We also evaluated management's qualitative credit risk assessment and performed our own independent assessment; and
- Reviewing management's disclosures of the arrangements and accounting in the financial statements.

Key observations

We consider that the financial liability recognised in respect of the guarantee, and the financial asset in respect of the guarantee fee income are reasonable and in accordance with the requirements of IFRS 9.

Independent Auditor's Report continued

5.4. Deferred taxation

Key audit matter description

As at 31 December 2019, the Group recognised total deferred tax assets of \$33.4 million (2018: \$23.6 million) and deferred tax liabilities of \$146.0 million (2018: \$137.0 million).

The recognition and measurement of certain Group deferred tax balances is inherently complex given the key operating entities have a US dollar functional currency for determining the accounting base but have a Russian Rouble tax base. Furthermore, the Group has historical losses for which the recognition and measurement of deferred tax assets will often require management judgement in estimating future probable taxable profits and interpreting relevant tax legislation.

Historically, management and Deloitte have also identified errors in relation to the recognition and measurement of deferred tax balances, caused by the complexity of calculations, the extensive use of Excel workings, and the absence of formally documented review controls.

Please refer to [note 21](#) to the Group financial statements and the Audit Committee report on [page 152](#) for further details.

How the scope of our audit responded to the key audit matter

We challenged management's judgements and assumptions in relation deferred tax recognition and measurement by:

- Obtaining an understanding of the relevant controls in relation to its deferred tax calculations;
- Reviewing and challenging deferred tax balances in the context of the relevant accounting requirements and tax legislation, which arise primarily in Russia, and the associated consolidation adjustments and challenging management's judgements on whether or not these items should have been recorded;
- Reviewing and challenging management's key judgements involving on-site audit team visits with management, including our tax specialists;
- Analysing material permanent differences in the Group income tax reconciliation and determining whether they include any temporary tax differences;
- Assessing material 2019 transactions to determine whether the deferred tax impact has been appropriately reflected;
- Re-calculating deferred tax balances and evaluating whether the tax and accounting base used in the management's calculation are accurate;
- Re-assessing the historical errors and confirming that the relevant deferred tax balances have been calculated appropriately in line with local tax legislation and IAS 12 Income taxes; and
- Reviewing the accuracy and completeness of the Group's consolidated unrecognised deferred tax disclosed in the financial statements.

Key observations

We considered that the Group's deferred tax balances are accounted for in line with the requirements of IAS 12.

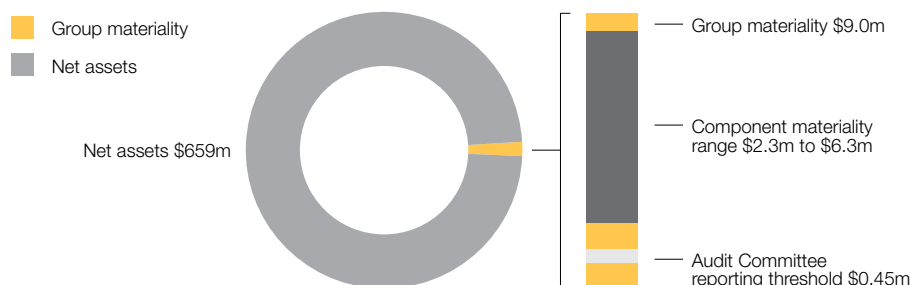
6. Our application of materiality

6.1. Materiality

We define materiality as the magnitude of misstatement in the financial statements that makes it probable that the economic decisions of a reasonably knowledgeable person would be changed or influenced. We use materiality both in planning the scope of our audit work and in evaluating the results of our work.

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

	Group financial statements	Parent company financial statements
Materiality	\$9.0 million (2018: \$8.5 million)	\$8.9 million (2018: \$7.6 million)
Basis for determining materiality	Less than 2% of the Group's net assets, consistent with the approach taken in 2018.	Less than 2% of the Company's net assets, consistent with the approach taken in 2018.
Rationale for the benchmark applied	The Group's net asset value reflects its mining assets and proven and probable gold reserves which support those assets. We determined that using a balance sheet metric, rather than profit-based metric, provides a more stable base for materiality, and is more reflective of the scale of the Group's operations.	We have determined materiality based on the net asset position of the Company as its principal activity is to hold investments in subsidiaries.



6.2. Performance materiality

We set performance materiality at a level lower than materiality to reduce the probability that, in aggregate, uncorrected and undetected misstatements exceed the materiality for the financial statements as a whole. Group performance materiality was set at 60% of Group materiality for the 2019 audit (2018: 70%). In determining performance materiality, we considered the following:

- Control environment: Historically, we identified a number of control deficiencies in the Group's internal controls and IT systems for financial reporting.

- Historical errors: Historically, a number of adjustments were identified through the financial closing process which related to prior years. The items that were judged by management to be material were restated in the prior year financial statements.

6.3. Error reporting threshold

We agreed with the Audit Committee that we would report to the Committee all audit differences in excess of \$450,000 (2018: \$450,000), as well as differences below that threshold that, in our view, warranted reporting on qualitative grounds. We also report to the Audit Committee on disclosure matters that we identified when assessing the overall presentation of the financial statements.

7. An overview of the scope of our audit

7.1. Identification and scoping of components

The scope of our audit work was determined by obtaining an understanding of the Group and its environment, and assessing the risks of material misstatement at the Group level.

Considering the key developments in the year, our Group audit focused primarily on the operating locations, being the three operating mines (2018: three), eleven service entities (2018: eleven), six exploration companies (2018: six), twelve finance and holding companies (2018: twelve) as well as on the Group's associate, IRC. All of the operating mines were subject to a full scope audit, while the exploration assets, finance and holding companies and service entities were subject to specified audit procedures, including testing of the capitalised spend on exploration activities, an impairment assessment and substantive testing of borrowings, material cost of sales and inventory balances, or desktop reviews. The Group's associate was subject to specified audit procedures. The extent of our audit procedures was based on our assessment of the risks of material misstatement and of the materiality of the Group's business operations at the selected locations.

These operating mines represent the principal business units within the Group's reportable segments and account for 88% (2018: 72%) of the Group's net assets and 93% (2018: 94%) of the Group's revenue. They were also selected to provide an appropriate basis for undertaking audit work to address the significant risks of material misstatement identified above.

7.2. Our consideration of the control environment

In view of a number of control deficiencies identified in the Group's internal controls and IT systems for the financial reporting period, we did not take a controls reliance audit approach in relation to any of the key audit matters. These items, along with the subsequent actions taken and planned by the Group to address these, are further set out on [page 146](#) of the Annual Report.

7.3. Working with other auditors

Full scope audits and specified audit procedures were performed by the component teams in Russia and Hong Kong under the direct supervision of the Group audit team and executed at levels of materiality applicable to each individual entity. The materiality applied to components, ranged from \$2.3 million to \$6.3 million (2018: \$2.1 million to \$7.6 million). The Group team took direct responsibility for the audit work in respect of the consolidation process as well as the Group and Company financial statements. The Group team planned, oversaw and directed the work performed by the component auditors. The procedures performed included, but were not limited to, site visits to Group's operating locations, regular communications with the component auditors, a review of the reports provided on the results of the work undertaken by the component audit teams as well as a detailed review of the underlying working papers and challenging the procedures performed to assess compliance with the relevant professional standards.

During the audit the senior members of the Group audit team visited Moscow to review the work performed by the Russian component team and the Amur region of Russia to visit the Group's assets and hold meetings with senior operational management. We were unable to visit the Hong Kong component audit team due to COVID-19 travel restrictions and therefore performed our Group audit review and oversight procedures remotely.

8. 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.

In connection with our audit of the financial statements, 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 audit or otherwise appears to be materially misstated.

If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the financial statements or a material misstatement of the other information. 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.

In this context, matters that we are specifically required to report to you as uncorrected material misstatements of the other information include where we conclude that:

- **Fair, balanced and understandable** – the statement given by the directors that they consider the annual report and financial statements taken as a whole is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's position and performance, business model and strategy, is materially inconsistent with our knowledge obtained in the audit; or
- **Audit committee reporting** – the section describing the work of the Audit Committee does not appropriately address matters communicated by us to the Audit Committee; or
- **Directors' statement of compliance with the UK Corporate Governance Code** – the parts of the directors' statement required under the Listing Rules relating to the company's compliance with the UK Corporate Governance Code containing provisions specified for review by the auditor in accordance with Listing Rule 9.8.10R (2) do not properly disclose a departure from a relevant provision of the UK Corporate Governance Code.

We have nothing to report in respect of these matters.

9. Responsibilities of directors

As explained more fully in the directors' responsibilities statement, 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 Group's and the parent company's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or the parent company or to cease operations, or have no realistic alternative but to do so.

10. 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.

Details of the extent to which the audit was considered capable of detecting irregularities, including fraud and non-compliance with laws and regulations are set out below.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/ auditors responsibilities. This description forms part of our auditor's report.

11. Extent to which the audit was considered capable of detecting irregularities, including fraud

We identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and then design and perform audit procedures responsive to those risks, including obtaining audit evidence that is sufficient and appropriate to provide a basis for our opinion.

11.1. Identifying and assessing potential risks related to irregularities

In identifying and assessing risks of material misstatement in respect of irregularities, including fraud and non-compliance with laws and regulations, we considered the following:

- The nature of the industry and sector, control environment and business performance including the design of the Group's remuneration policies, key drivers for directors' remuneration, bonus levels and performance targets;
- Results of our enquiries of management, internal audit and the Audit Committee about their own identification and assessment of the risks of irregularities;
- Any matters we identified having obtained and reviewed the Group's documentation of their policies and procedures relating to:
 - Identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
 - Detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud;
 - The internal controls established to mitigate risks of fraud or non-compliance with laws and regulations;
- The matters discussed among the audit engagement team including significant component audit teams and involving relevant internal specialists, including tax, valuations, IT, and industry specialists regarding how and where fraud might occur in the financial statements and any potential indicators of fraud.

As a result of these procedures, we considered the opportunities and incentives that may exist within the organisation for fraud and identified the greatest potential for fraud in the following areas: revenue recognition and going concern. In common with all audits under ISAs (UK), we are also required to perform specific procedures to respond to the risk of management override.

We also obtained an understanding of the legal and regulatory frameworks that the Group operates in, focusing on provisions of those laws and regulations that had a direct effect on the determination of material amounts and disclosures in the financial statements. The key laws and regulations we considered in this context included the UK Companies Act, Listing Rules and relevant tax legislation.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the financial statements but compliance with which may be fundamental to the Group's ability to operate or to avoid a material penalty. These included the Group's operating licences, regulatory requirements and environmental regulations.

11.2. Audit response to risks identified

As a result of performing the above, we did not identify any key audit matters related to the potential risk of fraud or non-compliance with laws and regulations.

Our procedures to respond to risks identified included the following:

- Reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with provisions of relevant laws and regulations described as having a direct effect on the financial statements;
- Enquiring of management, the Audit Committee and legal counsel concerning actual and potential litigation and claims;
- Performing analytical procedures to identify any unusual or unexpected relationships that may indicate risks of material misstatement due to fraud;

- Reading minutes of meetings of those charged with governance, reviewing internal audit reports and reviewing correspondence with HMRC and other relevant regulatory authorities;
- Reviewing the disclosures in the Audit Committee Report on [page 149](#) relating to fraud considerations;
- In addressing the risk of fraud in relation to going concern, assessing the cash flow forecast judgements and assumptions for indications of potential bias;
- In addressing the risk of fraud in relation to revenue recognition, assessing the completeness and sales revenue timing judgment for indications of potential bias;
- In addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business.

We also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams, and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

Report on other legal and regulatory requirements

12. Opinions on other matters prescribed by the Companies Act 2006

In our opinion the part of the directors' remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

In our opinion, based on the work undertaken in the course of the audit:

- The information given in the strategic report and the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements; and
- The strategic report and the directors' report have been prepared in accordance with applicable legal requirements.

In the light of the knowledge and understanding of the Group and the parent company and their environment obtained in the course of the audit, we have not identified any material misstatements in the strategic report or the directors' report.

13. Matters on which we are required to report by exception

13.1. Adequacy of explanations received and accounting records

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- We have not received all the information and explanations we require for our audit; or
- Adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or
- The parent company financial statements are not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

13.2. Directors' remuneration

Under the Companies Act 2006 we are also required to report if in our opinion certain disclosures of directors' remuneration have not been made or the part of the directors' remuneration report to be audited is not in agreement with the accounting records and returns.

We have nothing to report in respect of these matters.

14. Other matters

14.1. Auditor tenure

Following the recommendation of the Audit Committee, we were initially appointed by the Board on 15 May 2009 to audit the financial statements for the year ending 31 December 2009 and subsequent financial periods. The period of total uninterrupted engagement including previous renewals and reappointments of the firm is eleven years, covering the years ending 31 December 2009 to 31 December 2019. The 31 December 2019 audit was our last year of engagement as the Group's external auditor as detailed on [page 146](#) of the Annual Report.

Consistency of the audit report with the additional report to the Audit Committee

Our audit opinion is consistent with the additional report to the Audit Committee we are required to provide in accordance with ISAs (UK).

15. Use of our report

This report is made solely to the company's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. 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.

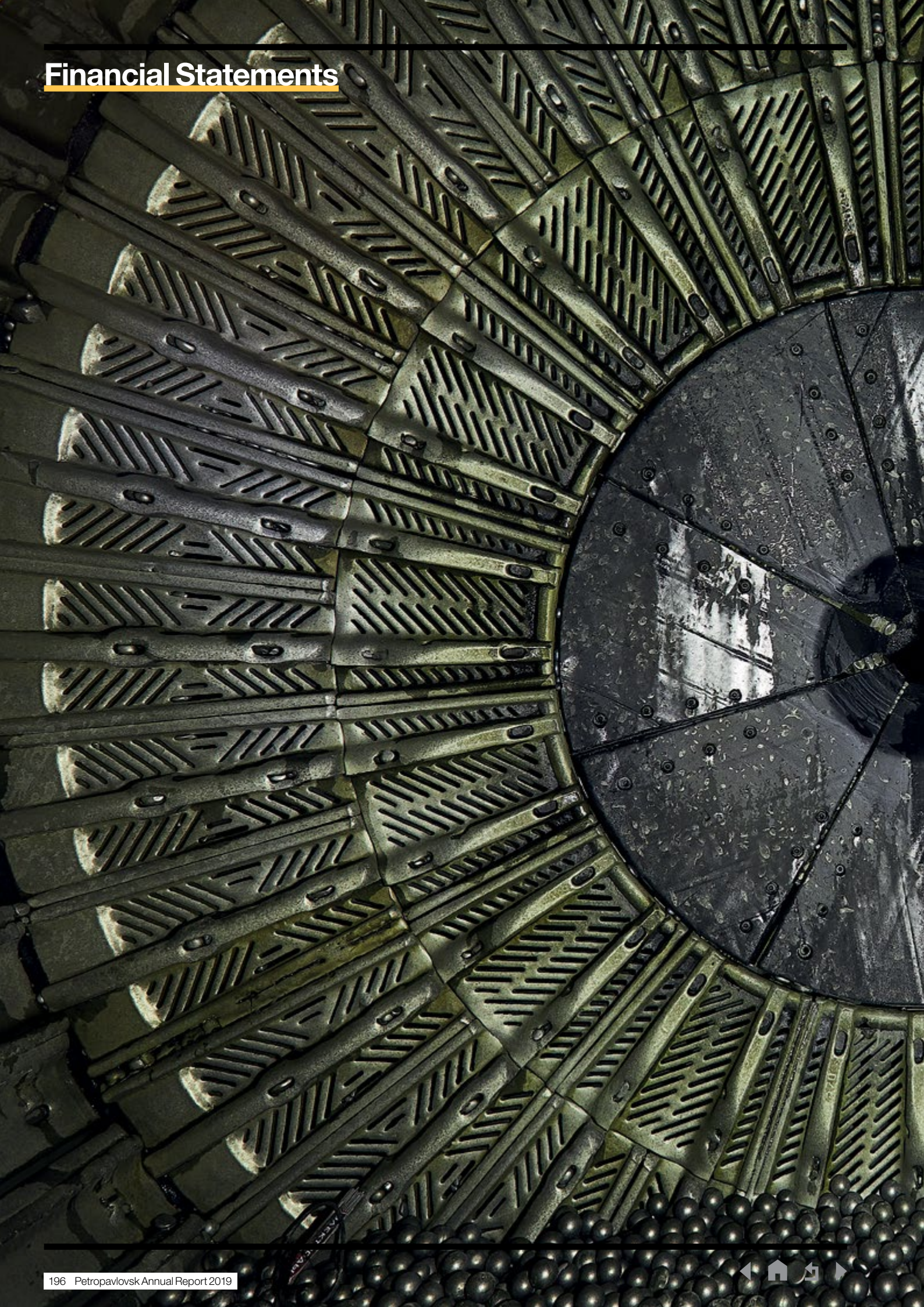
Christopher Thomas
(Senior statutory auditor)

For and on behalf of Deloitte LLP
Statutory Auditor
London, United Kingdom

26 May 2020



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Consolidated Statement of Profit or Loss

For the year ended 31 December 2019

	Note	2019 US\$'000	2018 ^(a) US\$'000
Group revenue	5	741,589	499,775
Operating expenses	6	(590,853)	(388,643)
Share of results of associate	14	(35,376)	15,480
Operating profit		115,360	126,612
Net impairment reversals/(impairment losses) on financial instruments	9	30,797	(28,634)
Investment and other finance income	9	8,826	3,775
Interest expense	9	(59,854)	(29,520)
Net other finance (losses)/gains	9	(42,190)	10,185
Profit before taxation		52,939	82,418
Taxation	10	(27,246)	(56,489)
Profit for the year		25,693	25,929
Attributable to:			
Equity shareholders of Petropavlovsk PLC		26,883	24,493
Non-controlling interests		(1,190)	1,436
Profit per share			
Basic profit per share	11	US\$0.01	US\$0.01
Diluted profit per share	11	US\$0.01	US\$0.01

(a) Impairment losses and impairment reversals on financial instruments for the year ended 31 December 2018 have been presented in a separate line item in the Consolidated Statement of Profit or Loss and the remaining Other finance gains and other finance losses for the year ended 31 December 2018 have been presented on a net basis. See [note 2](#) for details.

Consolidated Statement of Comprehensive Income

For the year ended 31 December 2019

	2019 US\$'000	2018 US\$'000
Profit for the year	25,693	25,929
Items that may be reclassified subsequently to profit or loss:		
Exchange differences:		
Exchange differences on translating foreign operations	2,102	(3,183)
Share of other comprehensive loss of associate	(1,084)	(329)
Cash flow hedges:		
Fair value (losses)/gains	(22,652)	20,238
Tax thereon	4,234	(3,743)
Transfer to revenue	31,471	3,419
Tax thereon	(5,865)	(633)
	8,206	15,769
Total comprehensive profit for the year	33,899	41,698
Attributable to:		
Equity shareholders of Petropavlovsk PLC	35,067	40,203
Non-controlling interests	(1,168)	1,495
	33,899	41,698

Consolidated Statement of Financial Position

As at 31 December 2019

	Note	31 December 2019 US\$'000	31 December 2018 ^(a) (restated) US\$'000	1 January 2018 ^(a) (restated) US\$'000
Assets				
Non-current assets				
Exploration and evaluation assets	12	53,123	43,115	53,518
Property, plant and equipment	13	1,209,817	1,144,063	977,314
Investments in associate	14	48,680	85,140	70,890
Inventories	15	60,257	56,805	72,720
Trade and other receivables	16	556	547	8,931
Derivative financial instruments	18	11,022	-	-
Other non-current assets		880	1,177	347
		1,384,335	1,330,847	1,183,720
Current assets				
Inventories	15	307,773	158,856	132,885
Trade and other receivables	16	105,975	66,741	75,830
Loans granted to an associate	26	-	50,966	-
Current tax assets		5,807	1,653	-
Cash and cash equivalents	17	48,153	26,152	11,415
		467,708	304,368	220,130
Total assets		1,852,043	1,635,215	1,403,850
Liabilities				
Current liabilities				
Trade and other payables	19	(389,041)	(219,845)	(88,333)
Current tax liabilities		(535)	(1,571)	(940)
Borrowings		-	-	(7,137)
Derivative financial instruments	18	(266)	(9,955)	-
Provision for close down and restoration costs	22	-	(804)	(200)
Lease liabilities	23	(5,373)	-	-
		(395,215)	(232,175)	(96,610)
Net current assets		72,493	72,193	123,520
Non-current liabilities				
Borrowings	20	(609,463)	(594,177)	(589,337)
Derivative financial instruments	18	(46,313)	(2,411)	(49,684)
Deferred tax liabilities	21	(112,566)	(113,354)	(72,380)
Provision for close down and restoration costs	22	(36,231)	(20,584)	(20,804)
Financial guarantee contract	26	(8,923)	(37,387)	(8,603)
Trade and other payables	19	-	(33,779)	-
Lease liabilities	23	(7,805)	-	-
		(821,301)	(801,692)	(740,808)
Total liabilities		(1,216,516)	(1,033,867)	(837,418)
Net assets		635,527	601,348	566,432
Equity				
Share capital	24	49,003	48,963	48,920
Share premium		518,142	518,142	518,142
Hedging reserve		-	(7,166)	(26,388)
Share based payments reserve		199	227	144
Translation reserve		(15,878)	(17,980)	(17,500)
Retained earnings		73,605	47,538	32,985
Equity attributable to the shareholders of Petropavlovsk PLC		625,071	589,724	556,303
Non-controlling interests		10,456	11,624	10,129
Total equity		635,527	601,348	566,432

(a) See note 2 for details regarding the restatement.

These consolidated financial statements for Petropavlovsk PLC, registered number 4343841, were approved by the Directors on 26 May 2020 and signed on their behalf by



Sir Roderic Lyne
Director



Dr Pavel Maslovskiy
Director

Consolidated Statement of Changes in Equity

For the year ended 31 December 2019

	Total attributable to equity holders of Petropavlovsk PLC								
	Share capital US\$'000	Share premium US\$'000	Share based payments reserve US\$'000	Hedging reserve US\$'000	Translation reserve US\$'000	Retained earnings/ (losses) US\$'000	Total US\$'000	Non- controlling interests US\$'000	Total equity US\$'000
Balance at 1 January 2018	48,920	518,142	144	(26,388)	(17,500)	32,985	556,303	10,129	566,432
Impact of adopting IFRS 9	–	–	–	–	2,703	(9,959)	(7,256)	–	(7,256)
Impact of adopting IFRS 15	–	–	–	–	–	58	58	–	58
Total comprehensive income/(loss)	–	–	–	19,222	(3,183)	24,164	40,203	1,495	41,698
Profit for the year	–	–	–	–	–	24,493	24,493	1,436	25,929
Other comprehensive income/(loss)	–	–	–	19,222	(3,183)	(329)	15,710	59	15,769
Deferred share awards	43	–	83	–	–	290	416	–	416
Balance at 31 December 2018	48,963	518,142	227	(7,166)	(17,980)	47,538	589,724	11,624	601,348
Total comprehensive income/(loss)	–	–	–	7,166	2,102	25,799	35,067	(1,168)	33,899
Profit for the year	–	–	–	–	–	26,883	26,883	(1,190)	25,693
Other comprehensive income/(loss)	–	–	–	7,166	2,102	(1,084)	8,184	22	8,206
Deferred share awards	40	–	(28)	–	–	268	280	–	280
Balance at 31 December 2019	49,003	518,142	199	–	(15,878)	73,605	625,071	10,456	635,527

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Consolidated Statement of Cash Flows

For the year ended 31 December 2019

	Note	2019 US\$'000	2018 ^(a) (restated) US\$'000
Cash flows from operating activities			
Cash generated from operations	25	189,321	329,814
Interest paid		(67,160)	(60,577)
Guarantee fee received in connection with ICBC facility	26	6,000	–
Income tax paid		(32,723)	(5,024)
Net cash from operating activities		95,438	264,213
Cash flows from investing activities			
Purchase of property, plant and equipment	25	(120,798)	(178,201)
Expenditure on exploration and evaluation assets	12	(10,136)	(3,153)
Proceeds from disposal of property, plant and equipment		111	1,170
Repayment of loans granted/ (loans granted) to an associate	26	56,243	(56,750)
Other loans granted	26	(389)	(210)
Interest received		3,283	3,667
Call option over non-controlling interests	26	(13,000)	–
Net cash used in investing activities		(84,686)	(233,477)
Cash flows from financing activities			
Issue of Bonds, net of transaction cost	20	120,561	–
Repayment of Bonds	20	(108,000)	–
Repayments of borrowings		–	(4,006)
Notes related costs		–	(2,599)
Debt transaction costs paid in connection with bank loans		–	(6,412)
Exercise of the Call Option over the Company's shares	18	(2,215)	–
Funds advanced to the Group under investment agreement with the Russian Ministry of Far East Development	30	8,772	–
Funds transferred under investment agreement with the Russian Ministry of Far East Development	30	(8,772)	–
Principal elements of lease payments		(1,468)	–
Net cash from/(used in) financing activities		8,878	(13,017)
Net increase in cash and cash equivalents in the period		19,630	17,719
Effect of exchange rates on cash and cash equivalents		2,371	(2,982)
Cash and cash equivalents at beginning of period	17	26,152	11,415
Cash and cash equivalents at end of period	17	48,153	26,152

(a) See [note 2](#) for details regarding the restatement.

Notes to the Consolidated Financial Statements

For the year ended 31 December 2019

1. General information

Petropavlovsk PLC (the 'Company') is a company incorporated and registered in England and Wales. The address of the registered office is 11 Grosvenor Place, London SW1X 7HH.

2. Significant accounting policies

2.1. Basis of preparation and presentation

The consolidated financial statements of Petropavlovsk PLC and its subsidiaries (the 'Group') have been prepared in accordance with International Financial Reporting Standards ('IFRS') as adopted by the European Union, IFRIC Interpretations and the Companies Act 2006. The consolidated financial statements have been prepared under the historical cost convention, as modified by the revaluation of certain financial assets and financial liabilities (including derivative financial instruments) at fair value through profit or loss. The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all years presented, unless otherwise stated.

Going concern

The Group monitors and manages its liquidity risk on an ongoing basis to ensure that it has access to sufficient funds to meet its obligations. Cash forecasts are prepared regularly based on a number of inputs including, but not limited to, forecast commodity prices and the impact of hedging arrangements, the Group's mining plan, forecast expenditure and debt repayment schedules. Sensitivities are run for different scenarios including, but not limited to, changes in commodity prices, cost inflation, different production rates from the Group's producing assets and the timing of expenditure on development projects. This is done to identify risks to liquidity and enable management to develop appropriate and timely mitigation strategies. The Group meets its capital requirements through a combination of sources including cash generated from operations, advances received from customers under prepayment arrangements and external debt.

The Group performed an assessment of the forecast cash flows for the period of at least 12 months from the date of approval of the 2019 Annual Report and Accounts. As at 31 December 2019, the Group had sufficient liquidity headroom. The Group is also satisfied

that it has sufficient headroom under a base case scenario for the period to June 2021. The Group has also performed projections under a layered stressed case that is based on:

- A gold price, which is approximately 10% lower than the upper quartile of the average of the market consensus forecasts;
- Processing of third-party concentrate through POX facilities is approximately 10% lower than projected and oxide gold production from underground operations at Pioneer and Malomir approximately 10% lower than projected; and
- Russian Rouble : US Dollar exchange rate that is approximately 10% stronger than the average of the market consensus forecasts.

This layered stressed case indicates sufficient liquidity for a period of at least 12 months including under downside IRC performance scenarios. In selecting these scenarios, the directors have also considered the potential impacts of COVID-19 which are described in detail on pages 6, 30 and 31 of this Annual Report.

As at 31 December 2019, the Group has guaranteed the outstanding amounts IRC owed to Gazprombank. The outstanding loan principal was US\$225 million as at 31 December 2019 and the facility is subject to an initial US\$160 million guarantee by the Group (see [note 26](#)). The assessment of whether there is any material uncertainty that IRC will be able to repay this facility as it falls due is another key element of the Group's overall going concern assessment. IRC projections demonstrate that IRC expects to have sufficient liquidity over the next 12 months and expects to meet its obligations under the Gazprombank Facility. If a missed repayment under debt or guarantee obligations occurs which, if not remedied by the Group, would result in events of default which, through cross-defaults and cross-accelerations, could cause all other Group's debt arrangements to become repayable on demand.

Having taken into account the aforementioned factors, and after making enquiries and considering the uncertainties described above, the Directors have a reasonable expectation that the Group will have adequate resources to continue in operational existence for the foreseeable future, being at least the next 12 months from the date of approval of the 2019 Annual Report and Accounts. Accordingly, they continue to adopt the going concern basis of accounting in preparing these consolidated financial statements.

Re-classification of deferred stripping costs

The following reclassifications have been made in the Consolidated Statement of Financial Position and Consolidated Statement of Cash Flows regarding the 2018 comparative and opening balances.

Following a review of the nature of the deferred stripping costs balance, the Group has concluded that these costs should have been presented as mining assets under property, plant and equipment. The comparative financial information has been aligned to be on a consistent basis with re-classifications in the Consolidated Statement of Financial Position from inventory current and non-current assets to property, plant and equipment non-current assets of US\$47.0 million as at 31 December 2018 and UUS\$39.8 million as at 1 January 2018. As a consequence, a US\$47.0 million reclassification from Net cash from operating activities to Net cash used in investing activities in the Consolidated Statement of Cash Flows for 2018 has been also made.

There is no impact on the Group's consolidated statement of profit or loss, profit per share, retained earnings or net assets for the year ended 31 December 2018.

Other re-classifications

Impairment losses and impairment reversals on financial instruments have been reclassified to be presented in a separate line item in the Consolidated Statement of Profit or Loss. Other finance gains and other finance losses have been presented in the Consolidated Statement of Profit or Loss on a net basis as the Group believes it is more representative since gains and losses relate to similar financial instruments. The comparative financial information for the year ended 31 December 2018 has been aligned to be on a consistent basis with re-classifications from Other finance losses to Net impairment reversals/(impairment losses) on financial instruments of US\$28.6 million and the remaining Other finance losses of US\$3.7 million and Other finance gains of US\$13.9 million presented on a net basis.

Current tax asset has been reclassified to be presented in a separate line item in the Consolidated Statement of Financial Position. The comparative financial information as at 31 December 2018 has been aligned to be on a consistent basis with re-classifications from Trade and other receivables of US\$1.7 million.

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

2.2. Adoption of new and revised standards and interpretations

As disclosed in [note 2](#) to the Group's consolidated financial statements for the year ended 31 December 2018, IFRS 16 "Leases" was effective for annual periods beginning on or after 1 January 2019 and have been adopted by the Group accordingly. The Group applied the modified retrospective transition approach and has not restated comparative information for the year prior to first adoption of IFRS 16. The impact of the adoption of this standard is disclosed below.

Impact of adoption - IFRS 16 "Leases":

The Group has adopted IFRS 16 using the modified retrospective method of adoption, with the date of initial application as at 1 January 2019, as permitted by transitional provisions of the standard, and has not restated comparatives for the annual period ended on 31 December 2018. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening balance sheet on 1 January 2019. The Group elected to use the transition practical expedient to not

reassess whether a contract is, or contains a lease at 1 January 2019. Instead, the Group applied the standard only to contracts that were previously identified as leases applying IAS 17 and IFRIC 4 at the date of initial application. IFRS 16 does not apply to the lease agreements to explore for or use minerals and similar non-regenerative resources and hence the Group continues to account lease payments associated with these leases as an expense ([note 2.14](#)).

Lessor accounting under IFRS 16 is substantially unchanged from IAS 17. Lessors will continue to classify all leases as either operating leases or finance leases using similar principles as in IAS 17. IFRS 16 has been evaluated not have any impact for leases where the Group is the lessor.

On adoption of IFRS 16, the Group recognised right-of-use assets and lease liabilities in relation to leases which had previously been classified as operating leases, except for short-term leases and leases of low-value assets. The right-of-use assets for all leases were recognised based on the amount equal to the

lease liabilities adjusted for any related prepaid and accrued lease expenses. Lease liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as of 1 January 2019. The weighted average lessee's incremental borrowing rate applied to the lease liabilities on 1 January 2019 was 9.3%.

The Group also applied the available practical expedients wherein it:

- Used a single discount rate to a portfolio of leases with reasonably similar characteristics;
- Applied the short-term leases exemptions to leases with lease terms that end within 12 months of the date of initial application;
- Used the recognition exemptions for lease contracts for which the underlying asset is of low value (low-value assets); and
- Excluded the initial direct costs from the measurement of the right-of-use asset at the date of initial application.

The table below presents a reconciliation from operating lease commitments disclosed as at 31 December 2018 to lease liabilities recognised as at 1 January 2019.

	1 January 2019 US\$'000
Operating lease commitments disclosed as at 31 December 2018	1,397
Add: Finance leases liabilities recognised under IAS 17 as at 31 December 2018	46
Add: Extension and termination options reasonably certain to be exercised	1,188
Less: Non-lease components previously included as part of commitments in relation to existing lease contracts	(376)
Less: Discounting using the incremental borrowing rate of at the date of initial application	(516)
Lease liabilities recognised as at 1 January 2019	1,739

For the movement in the right-of-use asset and associated lease liabilities during the year ended 31 December 2019 refer to [note 23](#).

Furthermore, the classification of cash flows has changed as operating lease payments under IAS 17 were presented as operating cash flows; whereas under the IFRS 16 model, lease payments are split into a principal and finance cost which will be presented as financing and operating cash flows respectively.

New standards and interpretations that are applicable to the Group, issued but not yet effective for the reporting period beginning 1 January 2019

At the date of approval of these financial statements, the following Standards and

Interpretations which have not been applied in these consolidated financial statements were in issue but not yet effective (and in some cases had not yet been adopted by the EU):

- Amendments to References to the Conceptual Framework in IFRS Standards (29 March 2018);
- Amendments to IFRS 3 (October 2018): Definition of Business;
- Amendments to IAS 1 and IAS 8 (October 2018): Definition of Material; and
- Amendments to IFRS 7, IFRS 9 and IAS 39 (September 2019): Interest Rate Benchmark Reform.

The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

IFRIC Interpretation 23 Uncertainty over Income Tax Treatment

The Group has adopted IFRIC 23 for the first time in the current year. The Interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of IAS 12 "Income Taxes". It does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The Interpretation requires the Group to:

- Determine whether uncertain tax positions are assessed separately or as a group;
- Assess whether it is probable that a tax authority will accept an uncertain tax treatment used, or proposed to be used, by an entity in its income tax filings;
- If yes, the Group should determine its accounting tax position consistently with the tax treatment used or planned to be used in its income tax filings; and
- If no, the Group should reflect the effect of uncertainty in determining its accounting tax position using either the most likely amount or the expected value method.

The Group determines whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments and uses the approach that better predicts the resolution of the uncertainty. The Group applies significant judgement in identifying uncertainties over income tax treatments. The Interpretation has not had a material impact on the consolidated financial statements of the Group.

Amendments to References to the Conceptual Framework in IFRS Standards (29 March 2018)

The Conceptual Framework is not a standard, and none of the concepts contained therein override the concepts or requirements in any standard. The purpose of the Conceptual Framework is to assist the IASB in developing standards, to help preparers develop consistent accounting policies where there is no applicable standard in place and to assist all parties to understand and interpret the standards. The revised Conceptual Framework includes some new concepts, provides updated definitions and recognition criteria for assets and liabilities and clarifies some important concepts. These amendments had no impact on the consolidated financial statements of the Group.

Amendments to IFRS 3 (October 2018): Definition of a Business

In October 2018, the IASB issued amendments to the definition of a business in IFRS 3 Business Combinations to help entities determine whether an acquired set of activities and assets is a business or not. They clarify the minimum requirements for a business, remove the assessment of whether market participants are capable of replacing any missing elements, add guidance to help entities assess whether an acquired process is substantive, narrow the definitions of a business and of outputs, and introduce an

optional fair value concentration test. New illustrative examples were provided along with the amendments. Since the amendments apply prospectively to transactions or other events that occur on or after the date of first application, the Group will not be affected by these amendments on the date of transition.

Amendments to IAS 1 and IAS 8 (October 2018): Definition of Material

In October 2018, the IASB issued amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors to align the definition of 'material' across the standards and to clarify certain aspects of the definition. The new definition states that, "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 entity."

The amendments to the definition of material is not expected to have a significant impact on the Group's consolidated financial statements.

Amendments to IFRS 7, IFRS 9 and IAS 39 (September 2019): Interest Rate Benchmark Reform

The amendments to IFRS 9 Financial Instruments 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 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 the consolidated financial statements of the Group as it does not have any interest rate hedges directly linked to interest rate benchmark reform.

2.3. Basis of consolidation

These consolidated financial statements consist of the financial statements of the Company and its subsidiaries as at the reporting date. Subsidiaries are all entities over which the Group has control.

Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the subsidiary and has the ability to affect those returns through its power over the subsidiary. Specifically, the Group controls a subsidiary if, and only if, it has all of the following:

- Power over the subsidiary (i.e. existing rights that give it the current ability to direct the relevant activities of the subsidiary);
- Exposure, or rights, to variable returns from its involvement with the subsidiary; and
- The ability to use its power over the subsidiary to affect its returns.

When the Group has less than a majority of the voting rights of a subsidiary or similar rights of a subsidiary, it considers all relevant facts and circumstances in assessing whether it has power over the subsidiary including:

- The size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- Potential voting rights held by the Group, other vote holders or other parties;
- Rights arising from other contractual arrangements; and
- Any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

The Company reassesses whether or not it controls a subsidiary if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of income and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Inter-company transactions, balances and unrealised gains on transactions between Group companies are eliminated on consolidation. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Where necessary, adjustments are made to the financial statements of subsidiaries to ensure consistency of accounting policies with the policies adopted by the Group.

Non-controlling interests in the net assets of consolidated subsidiaries are identified separately from the Group's equity therein. The

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

interests of non-controlling shareholders may be initially measured at fair value or at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. The choice of measurement is made on an acquisition-by-acquisition basis. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. The recognised income and expense are attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

2.4. Non-controlling interests

The Group treats transactions with non-controlling interests as transactions with equity owners. For purchases from non-controlling interests, the difference between any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. Gains or

losses on disposals to non-controlling interests are also recorded in equity.

2.5. Investments in associate

An associate is an entity over which the Group is in a position to exercise significant influence but not control or joint control.

Investments in associate are accounted for using the equity method of accounting. Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses of an associate in profit or loss and the Group's share of movements in other comprehensive income of an associate in other comprehensive income.

Losses of an associate in excess of the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate) are recognised only to the extent that the Group has incurred

legal or constructive obligations or made payments on behalf of the associate.

When a Group entity transacts with an associate of the Group, unrealised profits and losses are eliminated to the extent of the Group's interest in the relevant associate.

The carrying amount of equity-accounted investments is tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable.

2.6. Foreign currency translation

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). For the purpose of the consolidated financial statements, the results and financial position of each Group company are expressed in US Dollars, which is the Group's presentation currency. The functional currency of the Company is the US Dollar.

The rates of exchange used to translate balances from other currencies into US Dollars were as follows (currency per US Dollar):

	As at 31 December 2019	Average year ended 31 December 2019	As at 31 December 2018	Average year ended 31 December 2018
GB Pounds Sterling (GBP : US\$)	0.75	0.78	0.78	0.75
Russian Rouble (RUB : US\$)	61.91	64.69	69.47	62.68

In preparing the financial statements of the individual companies, transactions in currencies other than the entity's functional currency (foreign currencies) are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are remeasured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at the year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in profit or loss. Non-monetary items carried at fair value that are denominated in foreign currencies are translated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations which have a functional currency other than US Dollars are translated at exchange rates prevailing on the reporting date. Income and expense items are translated at the average exchange rates for the year, unless exchange rates fluctuate significantly during that year, in which case the exchange rates at the date of transactions are used. Exchange differences arising, if any, are recognised in other comprehensive income and expenses and accumulated in equity, with share attributed to non-controlling interests as appropriate. On the disposal of a foreign operation, all of the accumulated exchange differences in respect of that operation attributable to the shareholders of the Company are reclassified to profit or loss.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation.

2.7. Exploration and evaluation assets

Exploration and evaluation expenditure incurred in relation to those projects where such expenditure is considered likely to be recoverable through future extraction activity or sale, or where the exploration activities have not reached a stage which permits a reasonable assessment of the existence of reserves, are capitalised and recorded on the statement of financial position within exploration and evaluation assets for mining projects at the exploration stage.

Exploration and evaluation expenditure comprise costs directly attributable to:

- Researching and analysing existing exploration data;
- Conducting geological studies, exploratory drilling and sampling;
- Examining and testing extraction and treatment methods;
- Compiling pre-feasibility and feasibility studies; and
- Costs incurred in acquiring mineral rights, the entry premiums paid to gain access to



areas of interest and amounts payable to third parties to acquire interests in existing projects.

Exploration and evaluation assets are subsequently valued at cost less impairment. In circumstances where a project is abandoned, the cumulative capitalised costs related to the project are written off in the period when such decision is made.

Exploration and evaluation assets are not depreciated. These assets are transferred to mine development costs within property, plant and equipment when a decision is taken to proceed with the development of the project.

2.8. Property, plant and equipment

Mine development costs

Development expenditure incurred by or on behalf of the Group is accumulated separately for each area of interest in which economically recoverable resources have been identified. Such expenditure includes costs directly attributable to the construction of a mine and the related infrastructure. Once a development decision has been taken, the carrying amount of the exploration and evaluation expenditure in respect of the area of interest is aggregated with the development expenditure and classified under non-current assets as 'mine development costs'. Mine development costs are reclassified as 'mining assets' at the end of the commissioning phase, when the mine is capable of operating in the manner intended by management.

Mine development costs are not depreciated, except for property plant and equipment used in the development of a mine. Such property, plant and equipment are depreciated on a straight-line basis based on estimated useful lives and depreciation is capitalised as part of mine development costs.

Mining assets

Mining assets are stated at cost less accumulated depreciation. Mining assets include the cost of acquiring and developing mining assets and mineral rights, buildings, vehicles, plant and machinery and other equipment located on mine sites and used in the mining operations.

Mining assets, where economic benefits from the asset are consumed in a pattern which is linked to the production level, are depreciated using a units of production method based on the volume of ore reserves. This results in a depreciation charge proportional to the

depletion of reserves. The basis for determining ore reserve estimates is set out in [note 3.2](#). Where the mining plan anticipates future capital expenditure to support the mining activity over the life of the mine, the depreciable amount is adjusted for the related assets under construction and estimated future expenditure.

Certain property, plant and equipment within mining assets are depreciated based on estimated useful lives, if shorter than the remaining life of the mine or if such property, plant and equipment can be moved to another site subsequent to the mine closure.

Stripping activity assets

Stripping costs incurred during the development of the mine are capitalised as part of mine development costs and are subsequently depreciated over the life of a mine on a units of production basis.

Stripping costs incurred during the production phase of a mine if they relate to gaining improved access to an identified component of an ore body to be mined in future periods are deferred and capitalised as part of the mining assets and are written off to profit or loss in the period over which economic benefits related to the stripping activity are realised where this is the most appropriate basis for matching the costs against the related economic benefits.

Where, during the production phase, further development of the mine requires a phase of unusually high overburden removal activity that is similar in nature to pre-production mine development, such stripping costs are considered in a manner consistent with stripping costs incurred during the development of the mine before the commercial production commences.

Non-mining assets

Non-mining assets are stated at cost less accumulated depreciation. Non-mining assets are depreciated on a straight-line basis based on estimated useful lives.

Capital construction in progress

Capital construction in progress is stated at cost. On completion, the cost of construction is transferred to the appropriate category of property, plant and equipment. Capital construction in progress is not depreciated.

Depreciation

Property, plant and equipment are depreciated using a units of production method as set out above or on a straight-line basis based on estimated useful lives. Estimated useful lives normally vary as set out below.

	Average life Number of years
Buildings	15-50
Plant and machinery	3-20
Vehicles	5-7
Office equipment	5-10
Computer equipment	3-5

Residual values and useful lives are reviewed and adjusted if appropriate, at each reporting date. Changes to the estimated residual values or useful lives are accounted for prospectively.

2.9. Impairment of non-financial assets

Property, plant and equipment, exploration and evaluation assets and other non-financial assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. This applies to the assets held by the Group itself as well as the Group's share of the assets held by the associate.

When a review for impairment is conducted, the recoverable amount is assessed by reference to the higher of 'value in use' (being the net present value of expected future cash flows of the relevant cash generating unit) or 'fair value less costs to sell'. Where there is no binding sale agreement or active market, fair value less costs to sell is based on the best information available to reflect the amount the Group could receive for the cash generating unit in an arm's length transaction. Future cash flows are based on:

- Estimates of the quantities of the reserves and mineral resources for which there is a high degree of confidence of economic extraction;
- Future production levels;
- Future commodity prices (assuming the current market prices will revert to the Group's assessment of the long-term average price, generally over a period of up to five years); and
- Future cash costs of production, capital expenditure, environment protection, rehabilitation and closure.

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IAS 36 'Impairment of assets' includes a number of restrictions on the future cash flows that can be recognised in respect of future restructurings and improvement related capital expenditure. When calculating 'value in use', it also requires that calculations should be based on exchange rates current at the time of the assessment.

For operations with a functional currency other than the US Dollar, the impairment review is undertaken in the relevant functional currency. These estimates are based on detailed mine plans and operating budgets, modified as appropriate to meet the requirements of IAS 36 'Impairment of assets'.

The discount rate applied is based upon a post-tax discount rate that reflects current market assessments of the time value of money and the risks associated with the relevant cash flows, to the extent that such risks are not reflected in the forecast cash flows.

If the carrying amount of the asset exceeds its recoverable amount, the asset is impaired and an impairment loss is charged to profit or loss so as to reduce the carrying amount in the statement of financial position to its recoverable amount. A previously recognised impairment loss is reversed if the recoverable amount increases as a result of a reversal of the conditions that originally resulted in the impairment. This reversal is recognised in profit or loss and is limited to the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised in prior years.

2.10. Provisions for close down and restoration costs

Close down and restoration costs include the dismantling and demolition of infrastructure and the removal of residual materials and remediation of disturbed areas. Close down and restoration costs are provided for in the accounting period when the legal or constructive obligation arising from the related disturbance occurs, whether this occurs during the mine development or during the production phase, based on the net present value of estimated future costs. Provisions for close down and restoration costs do not include any additional obligations which are expected to arise from future disturbance. The costs are estimated on the basis of a closure plan. The cost estimates are calculated annually during the life of the operation to reflect known developments and are subject to formal review at regular intervals.

The amortisation or unwinding of the discount applied in establishing the net present value of provisions is charged to profit or loss in each accounting period. The amortisation of the discount is shown as a financing cost, rather than as an operating cost. Other movements in the provisions for close down and restoration costs, including those resulting from new disturbance, updated cost estimates, changes to the lives of operations and revisions to discount rates are capitalised within property, plant and equipment. These costs are then depreciated over the lives of the assets to which they relate.

Where rehabilitation is conducted systematically over the life of the operation, rather than at the time of closure, provision is made for the outstanding continuous rehabilitation work at each reporting date. All other costs of continuous rehabilitation are charged to profit or loss as incurred.

Changes in the measurement of a liability relating to the decommissioning of plant or other site preparation work (that result from changes in the estimated timing or amount of the cash flow or a change in the discount rate), are added to or deducted from the cost of the related asset in the current period. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in profit or loss. If the asset value is increased and there is an indication that the revised carrying value is not recoverable, an impairment test is performed in accordance with the accounting policy set out above.

2.11. Financial instruments

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

Financial assets and liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs attributable to financial assets and financial liabilities carried at fair value through profit or loss (FVPL) are expensed in profit or loss.

The subsequent measurement of financial assets and liabilities is set out below.

Effective interest method

The effective interest rate method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments through the expected life of the financial asset or financial liability, or where appropriate, a shorter period, to the gross carrying amount of the financial asset or amortised cost of the financial liability.

Probability of default

For the purpose of IFRS, management considers the following definition of "default", subject to underlying agreements:

- A missed or delayed disbursement of interest and/or principal;
- Bankruptcy, administration, legal receivership, or other legal blocks to the timely payment of interest and/or principal; or
- A distressed exchange occurs where a new security is issued which amounts to a diminished financial obligation or had the apparent purpose of helping the borrower avoid default.

Financial assets

Classification and subsequent measurement

The Group classified its financial assets in the following measurement categories:

- Those to be measured subsequently at fair value (either through profit or loss or through OCI); and
- Those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial asset.

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.



All other financial assets are subsequently measured at fair value either through OCI or profit or loss.

The Group may, at initial recognition, irrevocably designate a financial asset as measured at FVPL if doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as an 'accounting mismatch') that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases.

Impairment

The Group assesses on a forward-looking basis the expected credit losses (ECL) associated with its financial assets carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables and contract assets, the group applies the IFRS 9 simplified approach to measuring ECL which uses a lifetime expected loss allowance for all trade receivables and contract assets. Trade receivables and contract assets are written off when there is no reasonable expectation of recovery.

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired include observable data about the following events:

- Significant financial difficulty of the issuer or the borrower;
- A breach of contract, such as a default or past due event;
- The lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- It is becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
- The disappearance of an active market for that financial asset because of financial difficulties; or
- The purchase or origination of a financial asset at a deep discount that reflects the incurred credit losses.

For credit-impaired financial assets, the credit-adjusted effective interest rate is applied to the amortised cost of the financial asset from initial recognition. When calculating the credit-adjusted effective interest rate, The Group estimates the expected cash flows by considering all contractual terms of the financial asset and ECL.

Cash and cash equivalents

Cash and cash equivalents include cash on hand, demand deposits and short-term, highly liquid investments readily convertible to known amounts of cash and subject to insignificant risk of changes in value and are measured at cost which is deemed to be fair value as they have a short-term maturity.

Trade receivables

Trade receivables are recognised initially at their transaction price and are subsequently measured at amortised cost using the effective interest rate method, less loss allowance.

Financial liabilities and equity

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. Equity instruments issued are recorded at the proceeds received, net of direct issue cost.

Borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost, using the effective interest method. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in profit or loss over the period of the borrowings using the effective interest method.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

Trade and other payables

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost, using the effective interest method.

Financial guarantee contracts

Gazprombank Guarantee: The guarantee asset and liability under the financial guarantee contract are recognised as one unit of account at nil fair value on inception. Subsequently, the guarantee asset is measured at amortised cost based on the guarantee fee accrued to the reporting date that is expected to be received from IRC less provision for expected credit losses and the guarantee liability is measured at the amount of the loss allowance for expected credit losses. The guarantee liability is measured at the higher of the amount of the loss allowance in accordance with IFRS 9 and the amount initially recognised less the cumulative amount of income recognised in accordance with the principles of IFRS 15. As the amount initially recognised was nil, the guarantee liability is measured at the amount of the loss allowance for expected credit losses in accordance with IFRS 9.

ICBC Guarantee: The liability was measured on a consistent basis, however, upon transition to IFRS 9 the guarantee fee income asset was recognised as the present value of all future guarantee income measured at FVTPL.

Derivatives and hedging activities

Derivatives are initially recognised at fair value at the date the derivative contracts are entered into and are subsequently re-measured at fair value. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged.

The Group designates certain derivative financial instruments as hedging relationships. For the purposes of hedge accounting, hedging relationships may be of three types:

- Fair value hedges are hedges of particular risks that may change the fair value of a recognised asset or liability;
- Cash flow hedges are hedges of particular risks that may change the amount or timing of future cash flows; and
- Hedges of net investment in a foreign entity are hedges of particular risks that may change the carrying value of the net assets of a foreign entity.

Currently the Group has only cash flow hedge relationships.

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To qualify for hedge accounting the hedging relationship must meet several strict conditions on documentation, probability of occurrence, hedge effectiveness and reliability of measurement. If these conditions are not met, then the relationship does not qualify for hedge accounting. In this case the hedging instrument and the hedged item are reported independently as if there were no hedging relationship.

The effective portion of changes in fair value of derivatives that are designated and qualify as cash flow hedges is recognised in other comprehensive income. The fair value gain or loss relating to the ineffective portion is recognised immediately in profit or loss.

Amounts previously recognised in other comprehensive income and accumulated in hedging reserve in equity are reclassified to profit or loss in the periods when the hedged item is recognised in profit or loss, in the same line of the statement of profit or loss as the recognised hedged item.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated or exercised, or no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income at that time is accumulated in equity and is reclassified to profit or loss when the forecast transaction is ultimately recognised in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognised immediately in profit or loss.

Changes in fair value of any derivative instrument that does not qualify for hedge accounting are recognised in profit or loss immediately and included in other finance gains or losses.

Derivatives embedded in other financial instruments or non-financial host contracts are treated as separate derivatives when their risks and characteristics are not closely related to their host-contract and the host contract is not carried at fair value. Embedded derivatives are recognised at fair value at inception. Any change to the fair value of the embedded derivatives is recognised in other finance gains or losses in profit or loss. Embedded derivatives which are settled net are disclosed in line with the maturity of their host contracts.

2.12. Provisions

Provisions are recognised when the Group has a present obligation, whether legal or constructive, as a result of a past event for which it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the obligation at the reporting date. The discount rate used to determine the present value reflects current market assessments of the time value of money and the risks specific to the liability.

2.13. Inventories

Inventories include the following major categories:

- Stores and spares represent raw materials consumed in the production process as well as spare parts and other maintenance supplies;
- Construction materials represent materials for use in capital construction and mine development;
- Ore in stockpiles represent material that, at the time of extraction, is expected to be processed into a saleable form and sold at a profit. Ore in stockpiles is valued at the average cost per tonne of mining and stockpiling the ore. Quantities of ore in stockpiles are assessed through surveys and assays. Ore in stockpiles is classified between current and non-current inventory based on the expected processing schedule in accordance with the Group's mining plan;
- Work in progress inventory primarily represents gold in processing circuit that has not completed the production process. Work in progress inventory is valued at the average production costs; and
- Flotation concentrate represents very fine, powder-like product containing the valuable ore mineral from which most of the waste mineral has been eliminated. Flotation concentrate is valued at the average production costs.

Inventories are valued at the lower of cost and net realisable value, with cost being determined primarily on a weighted average cost basis.

Provisions are recorded to reduce ore in stockpiles, work in process, flotation concentrate and finished goods inventory to net realisable value where the net realisable value is lower than relevant inventory cost at the reporting date. Net realisable value is determined with reference to relevant market prices less estimated costs to complete production and bring the inventory into its saleable form. Provisions are also recorded to reduce mine operating supplies to net realisable value, which is generally determined with reference to salvage or scrap value, when it is determined that the supplies are obsolete. Provisions are reversed to reflect subsequent recoveries in net realisable value where the inventory is still on hand at the reporting date.

2.14. Leases

As explained in [note 2.2](#), the Group has changed its accounting policy for leases on adoption of IFRS 16.

Accounting policy applicable from 1 January 2019

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group recognises right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). The right-of-use assets are recognised at their fair value or, if lower, at the present value of the minimum lease payments, each determined at the commencement date of the lease. The corresponding liability to the lessor is included in the statement of financial position as a lease obligation. The right-of-use asset is included within Property, plant and equipment. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets. The Group applies IAS 36 to determine whether right-of-use assets are impaired and accounts for any identified impairment loss when incurred.

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable;

- Variable lease payment that are based on an index or a rate;
- Amounts expected to be payable by the lessee under residual value guarantees;
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is generally not readily determinable.

Subsequently, the lease liability is adjusted for interest and lease payments, as well as the impact of lease modifications, amongst others. Lease liabilities are presented as a separate line in the statement of financial position.

The Group continues to account for the payments associated with short-term leases, leases of low-value assets and leases to explore for or use minerals and similar non-regenerative resources as an expense on a straight-line basis in profit or loss.

Accounting policy applicable prior to 1 January 2019

Leases where the lessor retains substantially all the risks and rewards of ownership are classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

2.15. Revenue recognition

To recognise revenue under IFRS 15, the Group applies the following five steps:

- Identify the contract(s) with a customer;
- Identify the separate performance obligations in the contract: Performance obligations are promises in a contract to transfer to a customer goods or services that are distinct;
- Determine the transaction price: The transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring promised goods or services to a customer. If the consideration promised in a contract includes a variable amount, the Group estimates the amount of consideration to which it expects to be entitled in exchange

for transferring the promised goods or services to a customer;

- Allocate the transaction price to each performance obligation on the basis of the relative stand-alone selling prices of each distinct good or service promised in the contract; and
- Recognise revenue when a performance obligation is satisfied by transferring a promised good or service to a customer (which is when the customer obtains control of that good or service). A performance obligation may be satisfied at a point in time or over time. For a performance obligation satisfied over time, the Group selects an appropriate measure of progress to determine how much revenue should be recognised as the performance obligation is satisfied.

Sales of gold and silver

The majority of the Group's revenue is derived from the sale of refined gold. The sale of gold is classified as a single performance obligation and revenue is recognised at a point in time when control has passed to the customer, as specified in individual sales contracts. The sales price is determined with reference to LBMA fixing at the time of sale.

Silver is a co-product of gold production. Sales of silver is recognised in revenue. Sales of silver is classified as a single performance obligation and revenue is recognised at a point in time when control has passed to the customer, as specified in individual sales contracts.

Other revenue

Other revenue is recognised as follows:

- Engineering contracts: revenue under each engineering contract is classified as a single performance obligation and revenue is recognised over time based on percentage completion applied to the contract price;
- Flotation concentrate: the sale of flotation concentrate is classified as a single performance obligation and revenue is recognised at a point in time when control has passed to the customer, as specified in individual sales contracts;
- Sales of other goods represent the procurement of materials, consumables and equipment for third parties. Revenue from sales of other goods is classified as a single performance obligation and revenue is recognised at a point in time when control has passed to the customer;

- Other services: revenue from other services is classified as a single performance obligation and revenue is recognised over time during the term of the relevant contract; and
- Rental income is classified as a single performance obligation and revenue is recognised over time during the term of the relevant lease.

2.16. Borrowing costs

Borrowing costs are generally expensed as incurred except where they relate to the financing of acquisition, construction or development of qualifying assets, which are mining projects under development that necessarily take a substantial period of time to get prepared for their intended use. Such borrowing costs are capitalised and added to mine development costs of the mining project when the decision is made to proceed with the development of the project and until such time when the project is substantially ready for its intended use (which is when commercial production is ready to commence) or if active development is suspended or ceases.

To the extent that funds are borrowed to finance a specific mining project, borrowing costs capitalised represent the actual borrowing costs incurred. To the extent that funds are borrowed for the general purpose, borrowing costs capitalised are determined by applying the interest rate applicable to appropriate borrowings outstanding during the period to the average amount of capital expenditure incurred to develop the relevant mining project during the period.

2.17. Taxation

Tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in the statement of comprehensive income or directly in equity. In this case, the tax is also recognised in the statement of comprehensive income or directly in equity, respectively.

Current tax is the tax expected to be payable on the taxable income for the year calculated using rates that have been enacted or substantively enacted by the reporting date. It includes adjustments for tax expected to be payable or recoverable in respect of previous periods.

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Full provision is made for deferred taxation on all temporary differences existing at the reporting date with certain limited exceptions. Temporary differences are the difference between the carrying value of an asset or liability and its tax base. The main exceptions to this principle are as follows:

- Tax payable on the future remittance of the past earnings of subsidiaries, associate and jointly controlled entities is provided for except where the Company is able to control the remittance of profits and it is probable that there will be no remittance in the foreseeable future;
- Deferred tax is not provided on the initial recognition of goodwill or from the initial recognition of an asset or liability in a transaction that does not affect accounting profit or taxable profit and is not a business combination; and
- Deferred tax assets are recognised only to the extent that it is more likely than not that they will be recovered.

Deferred tax is provided in respect of fair value adjustments on acquisitions. These adjustments may relate to assets such as mining rights that, in general, are not eligible for income tax allowances. In such cases, the provision for deferred tax is based on the difference between the carrying value of the asset and its nil income tax base.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised using tax rates that have been enacted, or substantively enacted. Deferred tax is charged or credited to profit or loss, except when it relates to items charged or credited directly to equity, in which case the deferred tax is also dealt within equity.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set-off current tax assets against current tax liabilities, when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

3. Areas of judgement in applying accounting policies and key sources of estimation uncertainty

When preparing the consolidated financial statements in accordance with the accounting policies as set out in [note 2](#), the Directors necessarily make judgements and estimates that can have a significant impact on the financial statements. These judgements and estimates are based on the Director's best knowledge of the relevant facts and circumstances and previous experience. Actual results may differ from these estimates under different assumptions and conditions.

3.1. Critical accounting judgements

The following are the critical judgements, apart from those involving estimations (which are presented separately below), that the Directors have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in these financial statements.

Significant influence over IRC and IRC classification

As at 31 December 2019, the Group was the single largest shareholder of IRC, holding approximately 31.1% of IRC's issued shares. The Group considers that it exercises significant influence over, but does not control, IRC such that its equity is accounted for as an investment in an associate, in accordance with IAS 28 "Investments in associates". Significant influence is defined as the power to participate in the financial and operating policy decisions of the investee. If control were to exist, then IRC would be required to be consolidated as a subsidiary into the Group's consolidated financial information.

In making this assessment, the Group also considered the definition of control under IFRS 10 "Consolidated Financial Statements" being where an investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

The factors considered included:

- Relative shareholdings;
- Shareholder voting rights;
- Rights to nominate and appoint Directors and executive management of IRC;
- Influence over the IRC Board and executive management; and
- Operational independence of IRC.

After taking into account the aforementioned control factors in aggregate, it is considered that the Group does not exercise de facto control over IRC and IRC is not a subsidiary to the Group.

On 18 March 2020, the Group announced a preliminary agreement to dispose of its 29.9% out of 31.1% interest in IRC to Stocken Board AG for a cash consideration of US\$10 million, subject to certain conditions precedent being met, including the release of the Group's obligation to guarantee IRC's external debt under the Gazprombank Facility ([note 26](#)). This was a non-adjusting event and the investment was not considered to be an asset held-for-sale under IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" as at 31 December 2019.

Accordingly, accounting treatment applied to treat the Group's investment in IRC is as an investment in associate in accordance with IAS 28 "Investments in associates".

At the 31 December 2019, the Group's reviewed the carrying value of its 31.1% investment in IRC and concluded that, based on value-in-use calculations, a US\$23.4 million impairment is required against the US\$72.0 million carrying value of investment in IRC ([note 14](#)). The non-adjusting post year end effects of COVID-19 and the significant decline in the oil price have contributed a significant depreciation of the Russian Rouble against the US Dollar exchange rate. The above, combined with an increase in iron ore price, would have a positive effect on the value in use of the IRC investment.

Valuation of financial guarantee contract

The Group has provided a guarantee over IRC's external borrowings from Gazprombank, which was issued in March 2019. Details of the guarantee arrangements are set out in [note 26](#).

The Group made an accounting policy choice to recognise the guarantee asset and liability under the financial guarantee contract as one unit of account at nil fair value on inception. Subsequently, the guarantee asset is recognised on accruals basis and the guarantee liability is measured at the amount of the loss allowance for expected credit losses (ECL), as this was higher than the amount initially recognised less the cumulative amount of income recognised in accordance with the principles of IFRS 15.

In determining the amount of the loss allowance, the Group makes significant judgement with regards to whether the credit risk on the financial guarantee contract has increased significantly since initial recognition and whether the amount of the loss allowance is measured as a 12-month ECL or lifetime ECL in accordance with the IFRS 9 Impairment Model.

In making the assessment whether the credit risk on the financial guarantee contract has increased significantly since initial recognition, the Group considered the following factors:

- Changes in the cumulative probability of default;
- Changes in the calculated shadow credit rating of IRC using a Moody's scorecard methodology;
- Operational and financial performance of IRC during the period and future outlook;
- Compliance with debt service obligations and covenants under the Gazprombank Facility;
- Changes in the regulatory, economic, or technological environment of IRC; and
- The impact of the IRC investment impairment of \$23.4 million (note 14).

After taking into account the aforementioned factors in aggregate, the Directors concluded that the credit risk on the financial guarantee contract has not increased significantly since initial recognition. Accordingly, the financial guarantee contract liability as at 31 December 2019 was recognised in the amount of 12-month ECL of US\$8.9 million.

The following methodologies and key input and assumptions were used to estimate the amount of the 12-month ECL:

- Estimation of the total liability value using a number of valuation techniques incorporating an estimation of current market borrowing rates, as well as techniques considering the capital structure of IRC and future projections of the likelihood of default;
- Information used in the valuation included factors relating to IRC performance mentioned in addition to equity market prices for IRC and Petropavlovsk and yields on comparable credit bonds in the mining industry; and
- The total liability value is used to derive a market implied annualised default rate over the life of the guarantee which is then applied to the balance over the next 12 months to estimate the probability of default over this period and subsequent loss adjusted for assumed recovery.

Functional currency

IAS 21 "The Effects of Changes in Foreign Exchange Rates" defines functional currency as the currency of the primary economic environment in which the entity operates. The Group therefore performs an analysis of the currencies in which each subsidiary primarily generates and expends cash. This involves an assessment of the currency in which sales are generated and operational and capital expenditures are incurred, and currency in which external borrowing costs are denominated. Management makes judgements in defining the functional currency of the Group's subsidiaries based on economic substance of the transactions relevant to these entities.

For each of the Group's consolidated entities, management performed analysis of relevant factors that are indicators of functional currency and, based on the analysis performed, determined functional currency, accordingly. The Group concluded that the functional currency for each of the subsidiaries in Russia, except for its research institute Irgiredmet, is the US Dollar. Functional currency for Irgiredmet was concluded to be the Russian Rouble.

Cash generating unit ("CGU") determination and impairment indicators

The Group exercises judgement in determining the Groups individual CGUs based upon an assessment of the whether the cash inflows generated are capable of being separately identifiable and independent. This assessment considered whether there is an active market for the outputs of each significant element of the production process, including gold concentrate, and the Group's CGUs were concluded to be Pioneer, Malomir and Albyn (note 4) with POX Hub facilities allocated between Pioneer and Malomir CGUs based on expected processing of flotation concentrate. Management also applies judgement in allocating assets that do not generate independent cash inflows to the Group's CGUs. Any changes to CGU determinations would impact the carrying values of the respective CGUs.

The Group considers both external and internal sources of information in assessing whether there are any indications that its CGUs are impaired. External sources of information include changes in the market, economic and legal environment in which the Group operates that are not within its control. Internal sources of information include the manner in which mining assets and plant and equipment are being used or are expected to be used and indicators of economic performance of such assets. Judgement is therefore required to determine whether these updates represent significant changes in the recoverable amount of an asset or CGU, and are therefore indicators of impairment or impairment reversal.

Advances from customers under gold sales contracts

The Group has entered into prepaid gold sales arrangements, which are settled solely through physical delivery and are priced based on the spot gold price, prevailing at the date of the respective shipment. The arrangements are considered to fall under IFRS 15 'Revenue from Contracts with Customers' and the advances received represent contract liabilities included within Trade and other payables as Advances from customers rather than falling to be accounted under IFRS 9 'Financial Instruments' on which case it would presented within borrowings. As of 31 December 2019, the relevant contract liabilities amount to US\$187.4 million (31 December 2018: US\$163.8 million).

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3.2. Key sources of estimation uncertainty

The key assumptions concerning the future, and other key sources of estimation uncertainty at the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below.

Ore reserve estimates

The Group estimates its ore reserves and mineral resources based on the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code) and the internally used Russian Classification System, adjusted to conform with the mining activity to be undertaken under the Group mining plan. Both the JORC Code and the Russian Classification System require the use of reasonable investment assumptions when reporting reserves, including future production estimates, expected future commodity prices and production cash costs.

Ore reserve estimates are used in the calculation of depreciation of mining assets using a units of production method ([note 13](#)), impairment charges ([note 6](#)) and for forecasting the timing of the payment of close down and restoration costs ([note 22](#)). Also, for the purposes of impairment reviews and the assessment of life of mine for forecasting the timing of the payment of close down and restoration costs, the Group may take into account mineral resources in addition to ore reserves where there is a high degree of confidence that such resources will be extracted.

Ore reserve estimates may change from period to period as additional geological data becomes available during the course of operations or economic assumptions used to estimate reserves change. Such changes in estimated reserves may affect the Group's financial results and financial position in a number of ways, including the following:

- Asset carrying values due to changes in estimated future cash flows ([note 6](#));
- Depreciation charged to profit or loss where such charges are determined by using a units of production method or where the useful economic lives of assets are determined with reference to the life of the mine;

- Provisions for close down and restoration costs where changes in estimated reserves affect expectations about the timing of the payment of such costs ([note 22](#)); and
- Carrying value of deferred tax assets and liabilities ([note 21](#)) where changes in estimated reserves affect the carrying value of the relevant assets and liabilities.

Impairment and impairment reversals

The Group reviews the carrying values of property, plant and equipment to determine whether there is any indication that those assets are impaired. The recoverable amount of an asset, or cash-generating unit ("CGU"), is measured as the higher of fair value less costs to sell and value in use.

The Group necessarily applies judgement in the determining the assumptions to be applied within the value in use calculations. The key assumptions which formed the basis of forecasting future cash flows and the value in use calculation are set out in [note 6](#).

Future changes to the key assumptions in the value in use calculation could impact the carrying value of the respective assets. The impairment assessments are sensitive to changes in commodity prices, foreign exchange rates and discount rates. Changes to these assumptions would result in changes to conclusions in relation to impairment, which could have a significant effect on the consolidated financial statements. Details of impairment and/or impairment reversals, together with a sensitivity analysis, in relation to the property, plant and equipment are set out in [note 6](#).

Valuation of convertible bonds

The conversion option is a derivative financial liability measured at fair value whose valuation incorporates among other inputs the Group's credit risk, implied credit spreads and historic share price volatility. The non-adjusting post year end effects of COVID-19 have resulted in a significant increase in the gold price that together with depreciation of the Russian Rouble, in which most of the Group's operating expenses are denominated, have contributed to significant increase in the share price of the Company increasing the value of the convertible bond option liability.

Taxation

The Group is subject to income tax in the UK, Russian Federation and Cyprus.

Deferred tax liabilities are calculated on taxable temporary differences, being the difference between the tax and accounting base.

Deferred tax assets, including those arising from unused tax losses carried forward for the future tax periods and deductible temporary differences, are recognised only when it is either probable that the future taxable profits will be available against which the unused tax losses can be utilised or there are sufficient taxable temporary differences.

Assumptions about the generation of future taxable profits depend on management's estimates of future cash flows. Judgements are also required about the application of income tax legislation. In addition, the functional currency for the subsidiaries in Russia is the US Dollar which gives rise to foreign exchange movements in relation to temporary differences and deferred tax ([note 10](#)).

The aforementioned estimate and assumptions are subject to risk and uncertainty and there is a possibility that changes in circumstances will alter expectations, which may impact the amount of deferred tax recognised in the statement of financial position and the amount of other tax losses and temporary differences not yet recognised. In such circumstances, the carrying amount of recognised deferred tax assets may require adjustment, resulting in a corresponding charge or credit to profit or loss. In particular, if the Russian Rouble was 10% weaker as at 31 December 2019, this would give rise to an additional US\$17.9 million deferred tax liability and corresponding increase to the tax charge for the year ended 31 December 2019.

Details of deferred tax disclosures are set out in [note 21](#).

3.3. Other sources of estimation uncertainty

Exploration and evaluation costs

The Group's accounting policy for exploration and evaluation expenditure results in exploration and evaluation expenditure being capitalised for those projects where such expenditure is considered likely to be recoverable through future extraction activity or sale or where the exploration activities have not reached a stage which permits a reasonable assessment of the existence of reserves. This policy requires management to make certain estimates and assumptions as to future events and circumstances, in particular whether the Group will proceed with development based on existence of reserves or whether an economically viable extraction operation can be established. Such estimates and assumptions may change from period to period as new information becomes available. If, subsequent to the exploration and evaluation expenditure being capitalised, a judgement is made that recovery of the expenditure is unlikely or the project is to be abandoned, the relevant capitalised amount will be written off to profit or loss. Details of exploration and evaluation assets are set out in [note 12](#).

Deferred stripping costs

Stripping costs are deferred and capitalised if they relate to gaining improved access to an identified component of an ore body to be mined in future periods. The capitalised amount is determined based on the volume of waste extracted, compared with expected ore volume in the identified component of the ore body. The identification of the components of a mine's ore body is a critical estimate and is made by reference to the respective life of mine plan. Changes to the life of mine plan, including the life and design of a mine, may result in the capitalisation of production stripping costs or adjustments of the carrying value of stripping costs capitalised in previous periods. As a result, there could be significant adjustments to the amounts of deferred stripping costs capitalised. Details of deferred stripping costs capitalised are set out in [note 13](#).

Close down and restoration costs

Costs associated with restoration and rehabilitation of mining sites are typical for extractive industries and are normally incurred at the end of the life of the mine. Provision is recognised for each mining site for such costs discounted to their net present value, as soon as the obligation to incur such costs arises. The costs are estimated on the basis of the scope of site restoration and rehabilitation

activity in accordance with the mine closure plan and represent management's best estimate of the expenditure that will be incurred. Estimates are reviewed annually as new information becomes available.

The actual costs may be different from those estimated due to changes in relevant laws and regulations, changes in prices as well as changes to the restoration techniques. The actual timing of cash outflows may be also different from those estimated due to changes in the life of the mine as a result of changes in ore reserves or processing levels. As a result, there could be significant adjustments to the provision for close down and restoration costs established which would affect future financial results.

Details of provision for close down and restoration costs are set out in [note 22](#).

Option to acquire non-controlling 25% interest in the Group's subsidiary LLC TEMI.

In May 2019, the Group entered into the option contract to acquire the remaining non-controlling 25% interest in the subsidiary LLC TEMI ('TEMI option') from Agestinia Trading Limited, a holder of 25% non-controlling interest in LLC TEMI, for an aggregate consideration of US\$60 million (adjusted to US\$53.5 million if certain conditions are met). LLC TEMI holds the licences for the Elginskoye Ore Field and Afanasievskaya Prospective Ore Area, which have substantial non-refractory gold reserves and resources, suitable for processing at the Albyn Plant. The estimate of the fair value of the option requires determination of the most appropriate inputs to the valuation model including expected volatility and making assumptions about them. The option fair value needs to be remeasured at the end of each reporting period up to the date of settlement. This requires a reassessment of the estimates used at the end of each reporting period. The Group employed an independent third-party expert to undertake the valuations of the underlying 25% interest in LLC TEMI and the TEMI option. The key inputs to determine the fair value of the call option are set out in notes [18](#) and [26](#). The non-adjusting post year end effects of COVID-19 have resulted in a significant increase in the gold price that together with depreciation of the Russian rouble, in which most of the Company's costs are denominated, both have a positive effect on the valuation of the TEMI option.

4. Segment information

The Group's reportable segments under IFRS 8, which are aligned with its operating locations, were determined to be Pioneer, Malomir and Albyn hard-rock gold mines which are engaged in gold and silver production as well as field exploration and mine development. With the closure of Pokrovskiy mine in 2018, as the site was transformed into a key component of the POX Hub, Pokrovskiy ceased being a reportable segment. POX Hub facilities are allocated between Pioneer and Malomir reportable segments based on the expected use by each segment.

Corporate and Other segment amalgamates corporate administration, in-house geological exploration and construction and engineering expertise, engineering and scientific operations and other supporting in-house functions as well as various gold projects and other activities that do not meet the reportable segment criteria.

Reportable segments are based on the internal reports provided to the Chief Operating Decision Maker ('CODM') to evaluate segment performance, decide how to allocate resources and make other operating decisions and reflect the way the Group's businesses are managed and reported.

The financial performance of the segments is principally evaluated with reference to operating profit less foreign exchange impacts.

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

4. Segment information continued

2019	Pioneer US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Consolidated US\$'000
Revenue					
Gold ^(a)	223,193	239,365	229,139	–	691,697
Silver	464	267	146	–	877
Other external revenue	–	–	–	49,015	49,015
Inter segment revenue	45,970	537	4,493	145,326	196,326
Intra group eliminations	(45,970)	(537)	(4,493)	(145,326)	(196,326)
Total Group revenue from external customers	223,657	239,632	229,285	49,015	741,589
Operating expenses and income					
Operating cash costs	(170,349)	(135,427)	(80,017)	(48,745)	(434,538)
Depreciation	(41,225)	(46,549)	(48,144)	(1,857)	(137,775)
Central administration expenses	–	–	–	(52,527)	(52,527)
Reversal of impairment of mining assets and in-house service	42,755	–	–	9,404	52,159
(Impairment)/reversal of impairment of ore stockpiles	(664)	(517)	3,959	–	2,778
Reversal of impairment/(impairment) of gold in circuit	101	(243)	–	–	(142)
Total operating expenses ^(b)	(169,382)	(182,736)	(124,202)	(93,725)	(570,045)
Share of results of associates	–	–	–	(35,376)	(35,376)
Segment result	54,275	56,896	105,083	(80,086)	136,168
Foreign exchange losses					(20,808)
Operating profit					115,360
Net impairment reversals on financial instruments					30,797
Investment and other finance income					8,826
Interest expense					(59,854)
Net other finance losses					(42,190)
Taxation					(27,246)
Profit for the year					25,693
Segment assets	629,169	705,230	315,152	199,578	1,849,129
Segment liabilities	(185,883)	(157,335)	(23,065)	(128,204)	(494,487)
Deferred tax – net					(112,566)
Unallocated cash					2,914
Borrowings					(609,463)
Net assets					635,527
Other segment information					
Additions to non-current assets:					
Exploration and evaluation expenditure	691	–	8,350	1,095	10,136
Capital Expenditure	34,945	24,840	22,009	18,362	100,156
Capitalised Stripping	14,454	12,653	–	–	27,107
Other items capitalised ^(c)	19,058	6,087	1,435	–	26,580
Average number of employees	2,910	1,284	1,442	3,345	8,981

(a) Net of US\$(31.5) million net of cash settlement paid by the Group for realised cash flow hedges.

(b) Operating expenses excluding foreign exchange losses (note 6).

(c) Interest and close down and restoration costs capitalised (note 13).

4. Segment information continued

2018	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Consolidated US\$'000
Revenue						
Gold ^(d)	171,023	8,173	98,343	189,135	–	466,674
Silver	591	29	61	160	–	841
Flotation concentrate	–	–	3,202	–	–	3,202
Other external revenue	–	–	–	–	29,058	29,058
Inter segment revenue	524	–	807	5	170,916	172,252
Intra group eliminations	(524)	–	(807)	(5)	(170,916)	(172,252)
Total Group revenue from external customers	171,614	8,202	101,606	189,295	29,058	499,775
Operating expenses and income						
Operating cash costs ^(e)	(107,549)	(8,667)	(53,279)	(84,471)	(31,286)	(285,252)
Depreciation	(37,899)	(681)	(33,335)	(69,643)	(445)	(142,003)
Central administration expenses	–	–	–	–	(39,195)	(39,195)
Reversal of impairment of mining assets	–	–	82,958	–	18,737	101,695
Impairment of exploration and evaluation assets	–	–	(12,192)	–	–	(12,192)
Impairment of ore stockpiles	–	–	(309)	(17,712)	–	(18,021)
Impairment of gold in circuit	(1,415)	(17)	(536)	(157)	–	(2,125)
Total operating expenses^(f)	(146,863)	(9,365)	(16,693)	(171,983)	(52,189)	(397,093)
Share of results of associates	–	–	–	–	15,480	15,480
Segment result	24,751	(1,163)	84,913	17,312	(7,651)	118,162
Foreign exchange gains						8,450
Operating profit						126,612
Net impairment losses on financial instruments						(28,634)
Investment and other finance income						3,775
Interest expense						(29,520)
Net other finance gains						10,185
Taxation						(56,489)
Profit for the year						25,929
Segment assets	437,203	–	630,918	319,139	188,516	1,575,776
Segment liabilities	(66,689)	–	(75,876)	(100,569)	(83,202)	(326,336)
Deferred tax – net						(113,354)
Unallocated cash						8,473
Loans granted to associate						50,966
Borrowings						(594,177)
Net assets						601,348
Other segment information						
Additions to non-current assets:						
Exploration and evaluation expenditure	1,092	–	1,090	971	–	3,153
Capital Expenditure	50,277	–	59,879	14,539	2,558	127,253
Capitalised Stripping	22,887	–	11,529	12,572	–	46,988
Other items capitalised ^(g)	28,789	–	5,130	(115)	–	33,804
Average number of employees	2,711	–	1,138	1,485	3,347	8,681

(d) Net of US\$(3.4) million net of cash settlement paid by the Group for realised cash flow hedges.

(e) Operating cash costs of Malomir include cost of flotation concentrate sold US\$2.6 million.

(f) Operating expenses excluding foreign exchange losses (note 6).

(g) Interest and close down and restoration costs capitalised (note 13).

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

4. Segment information continued

Entity wide disclosures

Revenue by geographical location^(a)

	2019 US\$'000	2018 US\$'000
Russia and CIS	678,348	499,716
United Kingdom of Great Britain and Northern Ireland	44,975	–
Switzerland	17,898	–
Other	368	59
	741,589	499,775

(a) Based on the location to which the product is shipped or in which the services are provided.

Non-current assets by location of asset^(b)

	2019 US\$'000	2018 (restated) US\$'000
Russia	1,371,358	1,329,660
Other	1,113	50
	1,372,471	1,329,710

(b) Excluding financial instruments and deferred tax assets.

Information about major customers

During the years ended 31 December 2019 and 31 December 2018 the Group generated revenues from the sales of gold to banks. Included in gold sales revenue for the year ended 31 December 2019 are revenues of US\$647 million which arose from sales of gold to two bank groups that individually accounted for more than 10% of the Group's revenue, namely US\$518 million to Gazprombank and US\$129 million to Sberbank group (2018: US\$451 million which arose from sales of gold to two banks that individually accounted for more than 10% of the Group's revenue, namely US\$368 million to Sberbank of Russia and US\$83 million to Gazprombank). The proportion of Group revenue of each bank may vary from year to year depending on commercial terms agreed with each bank. Management considers there is no major customer concentration risk due to high liquidity inherent to gold as a commodity.

5. Group revenue

	2019 US\$'000	2018 US\$'000
Sales of goods:		
Gold	691,697	466,674
Silver	877	841
Flotation concentrate	–	3,202
Other goods	33,395	14,603
Rendering of services:		
Engineering and construction contracts	12,535	11,653
Other services	2,347	2,136
Rental income	738	666
	741,589	499,775
Timing of revenue recognition:		
At a point in time	725,969	485,320
Over time	15,620	14,455
	741,589	499,775

6. Operating expenses

	2019 US\$'000	2018 US\$'000
Net operating expenses ^(a)	572,313	427,255
Reversal of impairment of mining assets and in-house service ^(a)	(52,159)	(101,695)
Impairment of exploration and evaluation assets ^(a)	–	12,192
(Reversal of impairment)/impairment of ore stockpiles ^(a)	(2,778)	18,021
Impairment of gold in circuit	142	2,125
Central administration expenses ^(a)	52,527	39,195
Foreign exchange losses/(gains)	20,808	(8,450)
	590,853	388,643

(a) As set out below.

Net operating expenses

	2019 US\$'000	2018 US\$'000
Depreciation	137,775	142,003
Staff costs	97,615	71,648
Materials	91,004	89,465
Flotation concentrate purchased	74,010	–
Fuel	43,612	40,077
External services	46,392	19,140
Mining tax charge/(credit)	15,917	(131)
Electricity	34,118	26,001
Smelting and transportation costs	858	365
Movement in ore stockpiles, work in progress, bullion in process, limestone and flotation concentrate attributable to gold production	(34,156)	(8,632)
Taxes other than income	7,706	6,418
Insurance	8,437	7,168
Rental fee	3,194	2,034
Provision for impairment of trade and other receivables	2,021	1,435
Bank charges	876	414
Repair and maintenance	6,896	5,400
Security services	4,503	3,892
Travel expenses	2,902	2,955
Goods for resale	19,471	11,200
Other operating expenses	9,162	6,403
	572,313	427,255

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

6. Operating expenses continued

Central administration expenses

	2019 US\$'000	2018 US\$'000
Staff costs	33,466	25,366
Professional fees	1,771	5,531
Insurance	797	616
Rental fee	481	1,723
Business travel expenses	2,000	1,541
Office costs	832	589
Other	13,180	3,829
	52,527	39,195

Impairment charges

Impairment of mining assets

The Group undertook a review of impairment indicators and impairment reversal indicators of the tangible assets attributable to its gold mining projects and supporting in-house service companies. Detailed calculations of recoverable amounts, which are value-in-use calculations based on discounted cash flows, were prepared which concluded no impairment was required as at 31 December 2019 and 2018.

Having considered the excess of estimated recoverable amounts over the carrying values of the associated assets on the statement of financial position as at 31 December 2019 and taking into consideration removed uncertainty connected with the timing of the final construction and performance of the POX hub, the Directors concluded on the following:

- A reversal of impairment previously recorded against the carrying value of the assets that are part of the Pioneer CGU would be appropriate. Accordingly, a pre-tax impairment reversal of US\$43.5 million (being a post-tax impairment reversal of US\$34.8 million) has been recorded against the associated assets within property, plant and equipment. The aforementioned impairment reversal takes into consideration the effect of depreciation attributable to relevant mining assets and intra-group transfers of previously impaired assets to Pioneer.
- A further reversal of impairment previously recorded against the carrying value of the assets of the supporting in-house service companies would be appropriate. Accordingly, a pre-tax impairment reversal

of US\$9.4 million (being a post-tax impairment reversal of US\$7.8 million) has been recorded against the associated assets within property, plant and equipment. The aforementioned impairment reversal takes into consideration the effect of depreciation attributable to relevant assets and intra-group transfers of previously impaired assets.

As at 31 December 2018, the Group recognised US\$83.0 million (US\$66.4 million post-tax) reversal of impairment previously recorded against the carrying value of the assets of the Malomir CGU and US\$18.7 million (US\$15.2 million post-tax) reversal of impairment previously recorded against the carrying value of the assets of the supporting in-house service companies to extent of the headroom available at Malomir and Albyn CGUs.

The key assumptions which formed the basis of forecasting future cash flows and the value in use calculation are set out below:

	Year ended 31 December 2019	Year ended 31 December 2018
Long-term real gold price	US\$1,400/oz	US\$1,300/oz
Discount rate ^(a)	7.0%	8.5%
RUB : US\$ exchange rate	RUB65.8 : US\$1	RUB67.0 : US\$1

(a) Being the post-tax real weighted average cost of capital, equivalent to a nominal pre-tax discount rate of 9.8% (2018: 12.5%).

With all other assumptions being constant, changes to the aforementioned key assumptions could potentially result in impairment of certain mining assets as set out below.

		Potential impairment ^(a)
Long-term real gold price	US\$1,260/oz	US\$109 million
Discount rate	8.0%	–
RUB : US\$ exchange rate	RUB60 : US\$1	US\$4 million

(a) In relation to Pioneer and Malomir CGUs.

6. Operating expenses continued

Impairment of exploration and evaluation assets

The Group performed a review of its exploration and evaluation assets and concluded no impairment was required as at 31 December 2019 (31 December 2018: the Group performed a review of its exploration and evaluation assets and concluded to suspend exploration at the Flanks of Malomir and surrender the relevant licences. An aggregate impairment charge of US\$12.2 million was recorded against associated exploration and evaluation assets during the year ended 31 December 2018).

As at 31 December 2019 and 31 December 2018, all exploration and evaluation assets in the statement of financial position related to the areas adjacent to the existing mines ([note 12](#)).

Impairment of ore stockpiles

The Group assessed the recoverability of the carrying value of ore stockpiles and recorded impairment charges/reversals of impairment as set out below:

	Year ended 31 December 2019			Year ended 31 December 2018		
	Pre-tax impairment charge US\$'000	Taxation US\$'000	Post-tax impairment charge US\$'000	Pre-tax impairment charge US\$'000	Taxation US\$'000	Post-tax impairment charge US\$'000
Pioneer	664	(133)	531	–	–	–
Malomir	517	(88)	429	309	(62)	247
Albyn	(3,959)	673	(3,286)	17,712	(3,011)	14,701
	(2,778)	452	(2,326)	18,021	(3,073)	14,948

7. Auditor's remuneration

The Group, including its overseas subsidiaries, obtained the following services from the Company's auditor and their associate:

	2019 US\$'000	2018 US\$'000
Audit fees and related fees		
Fees payable to the Company's auditor for the annual audit of the parent company and consolidated financial statements	1,021	803
Fees payable to the Company's auditor and their associate for other services to the Group:		
For the audit of the Company's subsidiaries as part of the audit of the consolidated financial statements	351	320
For the audit of subsidiary statutory accounts pursuant to legislation ^(a)	84	65
	1,456	1,188
Non-audit fees		
Other services pursuant to legislation – interim review	337	273
Fees for reporting accountants services ^(b)	400	900
	737	1,173

(a) Including the statutory audit of subsidiaries in the UK and Cyprus.

(b) Fees payable in relation to the circular for the ICBC guarantee restructuring ([notes 26](#)).

8. Staff costs

	2019 US\$'000	2018 US\$'000
Wages and salaries	103,728	80,090
Social security costs	26,952	20,855
Pension costs	121	115
Share-based compensation	280	416
	131,081	101,476
Average number of employees	8,981	8,681

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

9. Financial income and expenses and impairment of financial instruments

	2019 US\$'000	2018 US\$'000
Net impairment reversals/(impairment losses) on financial instruments		
Reversal of impairment/(impairment) of financial assets ^(a)	2,333	(3,163)
Financial guarantee contract ^(b)	28,464	(25,471)
	30,797	(28,634)
Investment and other finance income		
Interest income	3,216	3,775
Guarantee fee income ^(c)	5,610	–
	8,826	3,775
Interest expense		
Bank loans	–	(1,083)
Notes	(41,995)	(41,886)
Convertible bonds	(12,984)	(12,579)
Prepayment on gold sale agreements	(16,019)	(7,213)
Lease liabilities	(593)	–
	(71,591)	(62,761)
Interest capitalised	12,287	33,666
Unwinding of discount on environmental obligation	(550)	(425)
	(59,854)	(29,520)
Net other finance (losses)/gains		
Fair value (loss)/gain on the conversion option ^(d)	(31,127)	11,700
Loss on repurchase of the Existing Bonds ^(e)	(11,211)	–
Fair value gain/(loss) on the guarantee receivable ^(f)	3,607	(3,720)
Fair value loss on the call option over non-controlling interests ^(g)	(1,978)	–
Fair value (loss)/gain on other derivative financial instruments	(1,345)	1,961
Fair value (loss)/gain on listed equity investments	(302)	244
Gain on lease modification	166	–
	(42,190)	10,185

(a) Including US\$3.2 million reversal (2018: US\$3.2 million recognition) of ECL in relation to loans granted to IRC (note 26).

(b) 2019: US\$28.5 million gain, being net of:

– Recognition of US\$8.9 million guarantee contract liability under Gazprombank guarantee arrangements as at 31 December 2019 in the amount of 12-month ECL; and

– De-recognition of US\$(37.4) million guarantee contract liability previously recognised under ICBC guarantee arrangements in the amount of the lifetime ECL following termination of the ICBC Facility Agreement.

The determination of the Group's US\$8.9 million guarantee liability as at 31 December 2019 relies upon the critical judgement as to whether there has been a significant increase in IRC's credit risk from March 2019 to December 2019 (see the IRC guarantee critical judgement disclosed in note 3.1). Management have determined that there has not been a significant increase in credit risk since March 2019 and therefore the guarantee liability is measured in the amount of 12-month ECL. This is in contrast to the ICBC guarantee which was measured in the amount of the lifetime ECL as there had previously been a significant increase in credit risk for that guarantee since 2010. This difference in measurement has resulted in the US\$28.5 million net accounting gain.

2018: US\$25.5 million loss, being an increase in provision under ICBC guarantee arrangements from the 12-month ECL to the lifetime ECL as set out above.

Further details on the financial guarantee contracts are set out in note 26.

(c) Guarantee fee income under Gazprombank Guarantee arrangements (note 26).

(d) Result of re-measurement of the TEMI option to fair value (notes 18 and 26).

(e) Result of re-measurement of the conversion option to fair value (notes 18 and 20).

(f) Result of re-measurement of receivable from IRC under ICBC Guarantee arrangements to fair value, including US\$0.7 million guarantee fee income (2018: result of re-measurement of receivable from IRC under ICBC guarantee arrangements to fair value, net of US\$4.0 million guarantee fee income) (note 26).

(g) US\$100 million convertible bonds due 2020 (the 'Existing Bonds'); difference between the US\$108 million paid to fund the Repurchase Price and the carrying value of the Existing Bonds at redemption (note 20).

10. Taxation

	2019 US\$'000	2018 US\$'000
Current tax		
Russian current tax	29,660	19,861
	29,660	19,861
Deferred tax		
(Reversal)/origination of timing differences ^(a)	(2,414)	36,628
Total tax charge	27,246	56,489

(a) Including effect of foreign exchange movements in respect of deductible temporary differences of US\$(20.4) million (year ended 31 December 2018: US\$30.6 million) which primarily arises as the tax base for a significant portion of the future taxable deductions in relation to the Group's property, plant and equipment are denominated in Russian Rouble whilst the future depreciation charges associated with these assets will be based on their US Dollar carrying value and reflects the movements in the Russian Rouble to the US Dollar exchange rate.

The charge for the year can be reconciled to the profit before tax per the statement of profit or loss as follows:

	2019 US\$'000	2018 US\$'000
Profit before tax	52,939	82,418
Less: share of results of associate	35,376	(15,480)
Profit before tax (excluding associate)	88,315	66,938
Tax on profit (excluding associate) at the Russian corporation tax rate of 20% (2018: 20%)	17,663	13,387
Effect of the reduced corporation tax rate ^(a)	(4,813)	(354)
Effect of different tax rates of subsidiaries operating in other jurisdictions	1,239	1,161
Tax effect of expenses that are not deductible for tax purposes ^(b)	7,681	1,191
Tax effect of tax losses for which no deferred income tax asset was recognised ^(c)	11,967	17,055
Utilisation of previously unrecognised tax losses	(124)	(442)
Foreign exchange movements in respect of deductible temporary differences ^(d)	(20,424)	30,618
Income not subject to tax ^(e)	–	(2,209)
Other adjustments ^(f)	14,057	(3,918)
Tax charge	27,246	56,489

(a) Under the Russian Federal Law 144-FZ dated 23 May 2016 taxpayers who are participants to the Regional Investment Projects ("RIP") have the right to apply the reduced corporation tax rate over the period until 2027, subject to eligibility criteria. In 2019 and 2018, LLC Albynskiy Rudnik has received tax relief as a RIP participant and was entitled to the reduced statutory corporation tax rate of 17%. In 2019 LLC Malomirskiy Rudnik has received tax relief as a RIP participant and was entitled to the reduced statutory corporation tax rate of 17%.

(b) Primarily relate to fair value loss on re-measurement of the conversion option of the Convertible Bonds (note 9).

(c) Primarily relate to interest expense incurred in the UK and loss on repurchase of the Existing Bonds (note 9) (2018: primarily relate to interest expense and central administration expenses incurred in the UK and loss on fair value change on financial guarantee fee).

(d) Foreign exchange movements primarily arise as the tax base for a significant portion of the future taxable deductions in relation to the Group's property, plant and equipment are denominated in Russian Rouble whilst the future depreciation charges associated with these assets will be based on their US Dollar carrying value and reflects the movements in the Russian Rouble to the US Dollar exchange rate.

(e) 2018: Primarily relate to the fair value gain on re-measurement of the conversion option of the Convertible Bonds (note 9).

(f) 2019: Other adjustments primarily relate to Russian withholding tax on intercompany dividends and dividend income treated as not exempt from UK corporation tax under s.931R Corporation Tax Act 2009.

Tax laws, regulations and court practice applicable to the Group are complex and subject to frequent change, varying interpretations and inconsistent and selective enforcement. There are a number of practical uncertainties associated with the application of relevant tax legislation and there is a risk of tax authorities making arbitrary judgements of business activities. If a particular treatment, based on management's judgement of the Group's business activities, was to be challenged by the tax authorities, the Group may be subject to tax claims and exposures. Management has calculated a total exposure (including taxes and respective interest and penalties) estimated to be US\$10.5 million (2018: US\$8.3 million) of contingent liabilities, including US\$4.8 million (2018: US\$nil) in respect of income tax and US\$5.7 million (2018: US\$8.3 million) in respect of other taxes.

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11. Earnings per share

	2019 US\$'000	2018 US\$'000
Profit for the year attributable to equity holders of Petropavlovsk PLC	26,883	24,493
Interest expense on convertible bonds ^(a)	–	–
Profit used to determine diluted earnings per share	26,883	24,493
	No of shares	No of shares
Weighted average number of Ordinary Shares	3,309,193,559	3,305,069,755
Adjustments for dilutive potential Ordinary Shares ^(a)	–	–
Weighted average number of Ordinary Shares for diluted earnings per share	3,309,193,559	3,305,069,755
	US\$	US\$
Basic profit per share	0.01	0.01
Diluted profit per share	0.01	0.01

(a) Convertible bonds which could potentially dilute basic profit per ordinary share in the future are not included in the calculation of diluted profit per share because they were anti-dilutive for the years ended 31 December 2019 and 31 December 2018.

12. Exploration and evaluation assets

	Flanks of Pioneer US\$'000	Flanks of Albyn US\$'000	Other ^(a) US\$'000	Total US\$'000
At 1 January 2019	6,919	35,047	1,149	43,115
Additions	691	8,350	1,095	10,136
Reallocation and other transfers	(66)	–	–	(66)
Transfer to mining assets	–	–	(62)	(62)
At 31 December 2019	7,544	43,397	2,182	53,123

(a) Amounts capitalised in respect of acquisition of subsidiaries and exploration LLC "Vostok Geologiya" LLC "Perspectiva DV".

	Flanks of Pioneer US\$'000	Flanks of Albyn US\$'000	Flanks of Malomir US\$'000	Other US\$'000	Total US\$'000
At 1 January 2018	5,827	34,076	12,192	1,423	53,518
Additions	1,092	971	–	1,090	3,153
Impairment ^(b)	–	–	(12,192)	–	(12,192)
Transfer to mining assets ^(c)	–	–	–	(1,364)	(1,364)
At 31 December 2018	6,919	35,047	–	1,149	43,115

(b) Note 6.

(c) Amounts capitalised in respect of limestone, an essential reagent the pressure oxidation process, and underground water deposits to be used for the POX Hub operations.

13. Property, plant and equipment

	Mining assets US\$'000	Non-mining assets US\$'000 ^(a)	Capital construction in progress ^(d) US\$'000	Total US\$'000
Cost				
At 1 January 2018 (restated) ⁽ⁱ⁾	1,911,549	178,466	388,032	2,478,047
Additions ^(a) (restated)	98,697	2,730	72,814	174,241
Interest capitalised ^(b)	–	–	33,666	33,666
Close down and restoration cost capitalised ^(note 22)	138	–	–	138
Transfer from exploration and evaluation assets ^(note 12)	1,364	–	–	1,364
Transfers from capital construction in progress ^(c)	108,479	582	(109,061)	–
Disposals ^(e)	(53,744)	(4,526)	(3)	(58,273)
Disposals of subsidiaries	(7,400)	–	–	(7,400)
Reallocation and other transfers	(1,325)	(41)	988	(378)
Foreign exchange differences	–	(4,407)	(21)	(4,428)
At 31 December 2018 ⁽ⁱ⁾ (restated)	2,057,758	172,804	386,415	2,616,977
Recognition of right-of-use assets at the transition date according to IFRS 16	–	1,739	–	1,739
At 1 January 2019 after transition	2,057,758	174,543	386,415	2,618,716
Additions ^(a)	67,691	24,427	33,406	125,524
Interest capitalised ^(b)	–	–	12,287	12,287
Close down and restoration cost capitalised ^(note 22)	14,293	–	–	14,293
Transfer from exploration and evaluation assets ^(note 12)	62	–	–	62
Transfers from capital construction in progress ^(c)	390,540	815	(391,355)	–
Disposals ^(e)	(21,148)	(7,718)	(50)	(28,916)
Reallocation and other transfers	80	(271)	–	(191)
Foreign exchange differences	–	2,719	36	2,755
At 31 December 2019 ⁽ⁱ⁾	2,509,276	194,515	40,739	2,744,530
Accumulated depreciation and impairment				
At 1 January 2018	1,340,968	158,254	1,511	1,500,733
Charge for the year (restated) ⁽ⁱ⁾	140,345	2,016	–	142,361
Disposals	(52,818)	(4,410)	–	(57,228)
Disposals of subsidiaries	(7,400)	–	–	(7,400)
Reallocation and other transfers	(352)	(23)	(3)	(378)
Reversal of impairment ^(note 6)	(82,958)	(18,737)	–	(101,695)
Foreign exchange differences	–	(3,479)	–	(3,479)
At 31 December 2018 (restated)	1,337,785	133,621	1,508	1,472,914
Charge for the year	135,265	3,386	–	138,651
Disposals	(20,355)	(6,158)	(7)	(26,520)
Reallocation and other transfers	(4,843)	4,696	(110)	(257)
Reversal of impairment of mining assets and in-house service ^(note 6)	(42,755)	(8,013)	(1,391)	(52,159)
Foreign exchange differences	–	2,084	–	2,084
At 31 December 2019	1,405,097	129,616	–	1,534,713
Net book value				
At 31 December 2018 ^(h) (restated)	719,973	39,183	384,907	1,144,063
At 31 December 2019 ^(h)	1,104,179	64,899	40,739	1,209,817

(a) Including US\$27.2 million stripping cost capitalised (31 December 2018: US\$47.0 million).

(b) Borrowing costs were capitalised at the weighted average rate of the Group's relevant borrowings being 9.1% (2018: 9.3%).

(c) Being costs primarily associated with c the POX hub project and the Malomir flotation plant.

(d) Capital construction in progress includes US\$8.9 million costs associated with the POX Hub project (31 December 2018: US\$345.8 million).

(e) Including US\$13.8 million of fully depreciated fleet that is not suitable for future use due to wear and tear, US\$7.5 million disposals of mining fleet due to derecognition of the replaced part (31 December 2018: US\$18.1 million of fully depreciated mining fleet that is not suitable for future use due to wear and tear and US\$8.1 million disposals of mining fleet due to derecognition of the replaced part, US\$19.1 million disposals associated with expected closure of Pokrovskiy mine as the site is being transformed into a key component of the POX Hub, US\$5.8 million disposal of road due to the lack of need for further use).

(f) Including US\$485.2 million of fully depreciated property, plant and equipment (31 December 2018: US\$400.8 million).

(g) Corporate administration and in-house support function, including right-of-use assets. For the movement in the right-of-use assets during the period see [note 23](#).

(h) Including US\$41.9 million net book value of capitalized stripping cost (31 December 2018: US\$47.0 million).

(i) See [note 2](#) for details regarding the restatement, resulting in US\$39.8 million included in depreciation charge for 2018

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14. Investment in associate

	2019 US\$'000	2018 US\$'000
IRC Limited ('IRC')	48,680	85,140
	48,680	85,140

Summarised financial information for the associate that is material to the Group is set out below.

	IRC 2019 US\$'000	IRC 2018 US\$'000
Non-current assets		
Exploration and evaluation assets	19,877	19,497
Property, plant and equipment	522,640	533,446
Other non-current assets	14,859	15,185
	557,376	568,128
Current assets		
Cash and cash equivalents	4,292	7,637
Other current assets	46,106	34,195
	50,398	41,832
Current liabilities		
Borrowings ^{(a), (b)}	(20,703)	(111,954)
Other current liabilities	(80,288)	(55,080)
	(100,991)	(167,034)
Non-current liabilities		
Borrowings ^{(a), (b)}	(201,204)	(100,915)
Other non-current liabilities	(27,578)	(22,501)
	(228,782)	(123,416)
Net assets	278,001	319,510

(a) 31 December 2019: Gazprombank Facility.

On 18 December 2018, IRC entered into two facility agreements for a loan in aggregate of US\$240 million (the "Gazprombank Facility"). The Gazprombank Facility will mature in 2026 and consists of two tranches. The principal under the first tranche amounts to US\$160 million with interest being charged at the London Inter-bank Offer Rate ("LIBOR") + 5.7% per annum and is repayable in equal quarterly payments during the term of the Gazprombank Facility, the final payment in December 2026. The principal under the second tranche amounts to US\$80 million with interest being charged at LIBOR + 7.7% per annum and is repayable in full at the end of the term, in December 2026. Interest charged on the drawn down amounts under the two tranches is payable in equal quarterly payments during the term of the Gazprombank Facility.

As at 31 December 2019, the entire facility amount of US\$240 million has been fully drawn down.

The Gazprombank Facility is secured by (i) IRC's property, plant and equipment with net book value of US\$27 million, (ii) 100% equity share of Kapucius Services Limited in LLC KS GOK and (iii) a guarantee from the Company. Please refer to the [note 26](#) for the details on the guarantee arrangements. The Gazprombank Facility is also subject to certain financial covenants and requirements.

(b) 31 December 2018: including US\$158.8 million under ICBC Facility and loans provided by the Group ([note 26](#)) in the equivalent of US\$54.0 million. On 19 March 2019, IRC repaid the outstanding loan principal and interest under ICBC Facility in full and terminated the ICBC facility Agreement (the outstanding loan principal under ICBC Facility was US\$169.6 million as at 31 December 2018).

14. Investment in associate continued

	IRC Year ended 31 December 2019 US\$'000	IRC Year ended 31 December 2018 US\$'000
Revenue	177,164	151,549
Net operating (expenses)/ income	(178,653)	(53,876)
Including:		
Depreciation	(28,504)	(21,208)
Reversal of impairment of mining assets	–	90,483
Foreign exchange (losses)/gains	(6,181)	4,554
Impairment of financial assets	–	(7,741)
Investment income	83	82
Interest expense	(40,421)	(21,679)
Taxation	3,157	(130)
(Loss)/profit for the year	(38,670)	68,205
Other comprehensive loss	(3,483)	(1,057)
Total comprehensive (loss)/profit	(42,153)	67,148
Group's share %	31.1%	31.1%
Group's share in (loss)/profit for the year	(12,026)	21,210
Impairment of investment in associate	(23,350)	(5,730)
Share of results of associate	(35,376)	15,480

Impairment of investment in associate

The Group undertook a review of impairment indicators of its investment in IRC. Detailed calculations of recoverable amounts, which are value-in-use calculations based on discounted cash flows, were prepared which concluded a US\$23.4 million impairment was required as at 31 December 2019 and recorded accordingly (31 December 2018: US\$5.7 million impairment was required and recorded accordingly). The key assumptions which formed the basis of forecasting future cash flows and the value in use calculation as at 31 December 2019 were real long-term 62% iron ore price of US\$65.8 per dry metric tonne and discount rate, being the post-tax real weighted average cost of capital, of 10%.

On 18 March 2020, the Group announced a preliminary agreement to dispose of its 29.9% out of 31.1% interest in IRC as set out in [note 31](#).

15. Inventories

	2019 US\$'000	2018 (restated) US\$'000
Current		
Construction materials	6,600	6,267
Stores and spares	86,985	69,082
Ore in stockpiles ^{(a), (b)}	68,479	36,395
Gold in circuit	37,740	16,751
Bullion in process	4,732	606
Flotation concentrate	97,932	25,654
Other	5,305	4,101
	307,773	158,856
Non-current		
Ore in stockpiles ^{(a), (b), (c)}	60,257	56,805
	60,257	56,805

(a) As at 31 December 2019, ore in stockpiles include balances in the aggregate of US\$0.1 million carried at net realisable value (2018: US\$10.1 million).

(b) For details of ore stockpile impairments see [note 6](#).

(c) Ore in stockpiles that is not planned to be processed within twelve months after the reporting period

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16. Trade and other receivables

	2019 US\$'000	2018 US\$'000
Current		
VAT recoverable	51,499	20,474
Advances to suppliers	10,513	5,919
Prepayments for property, plant and equipment	9,216	7,233
Trade receivables ^(a)	10,254	13,389
Contract assets	2,856	3,307
Guarantee fee receivable ^(b)	9,417	6,829
Other debtors ^(c)	12,220	9,590
	105,975	66,741
Non-current		
Other	556	547
	556	547

(a) Net of provision for impairment of US\$1.2 million (2018: US\$0.9 million). Trade receivables are generally settled in less than three months.

(b) Please refer to notes 14 and 26 for the details of ICBC and Gazprombank guarantee arrangements.

(c) Net of provision for impairment of US\$1.7 million (2018: US\$1.1 million).

The Directors consider that the carrying amount of trade and other receivables approximates their fair value.

17. Cash and cash equivalents

	2019 US\$'000	2018 US\$'000
Cash at bank and in hand	14,181	10,682
Short-term bank deposits	33,972 ^(a)	15,470
	48,153	26,152

(a) Including US\$1.1 million of restricted bank deposit as at 31 December 2019 (31 December 2018: US\$nil).

18. Derivative financial instruments

	31 December 2019		31 December 2018	
	Assets US\$'000	Liabilities US\$'000	Assets US\$'000	Liabilities US\$'000
Current				
Forward gold contracts – cash flow hedge ^{(a), (b), (c)}	–	–	–	(8,819)
Call Option over the Company's shares ^(d)	–	–	–	(1,136)
Other	–	(266)	–	–
		(266)		(9,955)
Non-current				
Conversion option ^{(e), (f)}	–	(46,313)	–	(2,411)
Call option over non-controlling interests ^{(g), (h), (i)}	11,022	–	–	–
	11,022	(46,313)	–	(2,411)

(a) No forward contracts to sell gold are outstanding as at 31 December 2019 (31 December 2018: 200,000 ounces of gold at an average price of US\$1,252 per ounce).

(b) Measured at fair value and considered as Level 2 of the fair value hierarchy which valuation incorporates the following inputs:

- Gold forward curves observable at quoted intervals; and
- Observable credit spreads.

(c) The hedged forecast transactions were expected to occur at various dates during the period to December 2019.

Gain and losses recognised in the hedging reserve in equity as at the reporting date are recognised in the statement of profit or loss in the periods during which the hedged gold sale transactions occur. There was no ineffectiveness to be recorded from the cash flow hedge during the years ended 31 December 2019 and 2018.

(d) Cash settled call option issued in relation to 3.6 per cent. of the outstanding aggregate ordinary share capital in the Company exercisable between December 2018 and June 2019 at strike price of £0.068 and exercised during year ended 31 December 2019 resulting in the net cash settlement paid by the Group of an aggregate of US\$2.2 million.

(e) [Note 20](#).

(f) Measured at fair value and considered as Level 3 of the fair value hierarchy which valuation incorporates the following inputs:

- The Group's credit risk and implied credit spreads (Level 3);
- Historic share price volatility;
- Conversion price;
- Time to maturity; and
- Risk-free rate.

(g) Call option to acquire non-controlling 25% interest in the Group's subsidiary LLC TEMI: In May 2019, the Group entered into the option contract to acquire non-controlling 25% interest in LLC TEMI from its shareholder Agestia Trading Limited for an aggregate consideration of US\$60 million (adjusted to US\$53.5 million if certain conditions are met). LLC TEMI holds the licences for the Elginskoye Ore Field and Afanasievskaya Prospective Ore Are, which have substantial non-refractory gold reserves and resources, suitable for processing at the Albyn Plant. Further details on this transaction are set out in [note 26](#).

(h) Measured at fair value and considered as Level 3 of the fair value hierarchy which valuation incorporates the following inputs:

- The current valuation of the underlying investment (Level 3);
- Historic peers' volatility attributed to the valuation of the underlying investment (Level 3);
- The exercise price;
- Time to maturity; and
- Risk-free rate.

(i) The fair value of the TEMI option at 31 December 2019 is US\$11.0 million, which represent the premium paid to acquire the option of US\$13.0 million less a subsequent revaluation loss of US\$2.0 million.

The fair value of the option was initially recognised as US\$9.6 million upon initial recognition, resulting in a corresponding gain recognised within Net other finance gains and losses in the statement of profit or loss. This gain on initial recognition was primarily due to improvement in the gold price outlook between the pricing and completion of the transaction together with the judgements taken with regards to certain inputs into the relevant valuation models, in particular, historic volatility used as a proxy of the expected volatility of the underlying assets and being historic volatility of the comparable listed companies used for the valuations under IFRS 13 as opposed to historic gold market volatility used for the valuation of the contractual option premium.

In the condensed consolidated interim financial statements for the six months ended 30 June 2019 the fair value of the call option, net of the remaining unpaid premium, was recognised at US\$16.2 million, comprising the initial gain of \$9.6 million, a revaluation loss of \$0.4 million and the premium paid to date of \$7.0 million, with a corresponding net gain of US\$9.2 million recognised within Net other finance gains and losses in the statement of profit or loss. After further analysis and consideration of the IFRS 9 application guidance (which prohibits the recognition of day 1 gains based on valuation techniques that use unobservable inputs), this economic gain previously recognised in the period ended 30 June 2019 has now been deferred for accounting purposes.

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19. Trade and other payables

	2019 US\$'000	2018 US\$'000
Current		
Trade payables ^(a)	134,818	50,099
Payables for property, plant and equipment	5,810	5,242
Advances from customers ^(b)	188,968	131,752
Advances received on resale contracts ^(c)	7,698	5,432
Accruals and other payables	51,747	27,320
	389,041	219,845
Non-current		
Advances from customers ^(d)	–	33,779
	–	33,779

(a) The trade payables as at 31 December 2019 include US\$81.0 million payable for flotation concentrate purchased (31 December 2018: US\$nil).

(b) The current advances from customers as at 31 December 2019 include US\$152.5 million (31 December 2018: US\$86.0 million) and US\$34.9 million (31 December 2018: US\$44.0 million) advance payments received from Gazprombank and Sberbank, respectively, under gold sales agreements. Advance payments are to be settled against physical delivery of gold produced by the Group in regular intervals over the period of up to twelve months from the reporting date based on the sales price prevailing at delivery that is determined with reference to LBMA fixing. For details of interest charged in relation to the aforementioned advances please refer to [note 9](#).

(c) Amounts included in advances received on resale contracts at 31 December 2019 and 31 December 2018 relate to services performed by the Group's subsidiary, Irgiredmet, in its activity to procure materials such as reagents, consumables and equipment for third parties.

(d) The non-current advances from customers as at 31 December 2019 include US\$nil (31 December 2018: US\$33.8 million) advance payments received from Gazprombank under gold sales agreements. Advance payments are to be settled against physical delivery of gold produced by the Group in regular intervals over the period after twelve months from the reporting date based on the sales price prevailing at delivery that is determined with reference to LBMA fixing. For details of interest charged in relation to the aforementioned advances please refer to [note 9](#).

The Directors consider that the carrying amount of trade and other payables approximates to their fair value.

20. Borrowings

	2019 US\$'000	2018 US\$'000
Borrowings at amortised cost		
Notes ^(a)	500,377	499,007
Convertible bonds ^{(b), (c)}	109,086	95,170
	609,463	594,177
Amount due for settlement after 12 months	609,463	594,177
	609,463	594,177

(a) US\$500 million Guaranteed Notes due for repayment on 14 November 2022 (the "Notes"), measured at amortised cost. The Notes were issued by the Group's wholly owned subsidiary Petropavlovsk 2016 Limited and are guaranteed by the Company and its subsidiaries JSC Pokrovskiy Rudnik, LLC Albynskiy Rudnik and LLC Malomirskiy Rudnik. The Notes have been admitted to the official list of the Irish Stock Exchange and to trading on the Global Exchange Market of the Irish Stock Exchange on 14 November 2017. The Notes carry a coupon of 8.125% payable semi-annually in arrears. The interest charged was calculated by applying an effective interest rate of 8.35%.

(b) 31 December 2019: Debt component of the US\$125 million Convertible Bonds due on 03 July 2024 measured at amortised cost and not revalued. The bonds were issued by the Group's wholly owned subsidiary Petropavlovsk 2010 Limited (the "Issuer") on 03 July 2019 and are guaranteed by the Company. The bonds carry a coupon of 8.25% per annum, payable quarterly in arrears. The bonds are, subject to certain conditions, convertible into fully paid ordinary shares of the Company with an initial exchange price of US\$0.1350, subject to customary adjustment provisions. The interest charged was calculated by applying an effective interest rate of 12.08%.

The Group has used the US\$120.6 million net proceeds from the issue of US\$125 million Convertible Bonds to fund the repurchase of the outstanding US\$100 million convertible bonds as set out below, resulting in the net US\$12.6 million cash inflow.

Concurrently with the issue of the US\$125 million Convertible Bonds, the Group also concluded the invitation to repurchase (the "Repurchase") any and all of the outstanding US\$100 million 9.00% convertible bonds due 2020 (the "Existing Bonds"). Holders whose Existing Bonds have been accepted for purchase by the Issuer pursuant to the Repurchase were eligible to receive US\$1,080 per US\$1,000 in principal amount of the Existing Bonds (the "Repurchase Price"). The Issuer also paid, in respect of Existing Bonds accepted for purchase pursuant to the Repurchase, a cash amount representing the accrued but unpaid interest ("Accrued Interest") on each US\$1,000 in aggregate principal amount of Existing Bonds accepted for repurchase from and including 18 June 2019, being the immediately preceding interest payment date applicable to the Existing Bonds, to but excluding the settlement date for the Repurchase (the "Repurchase Settlement Date"). The Accrued Interest, based on a Repurchase Settlement Date of 3 July 2019 comprised US\$3.75 per US\$1,000 in aggregate principal amount of Existing Bonds. The remaining Existing Bonds were redeemed at the Repurchase Price on 9 July 2019. The Issuer also paid a cash amount representing the Accrued Interest on each US\$1,000 in aggregate principal amount of Existing Bonds from and including 18 June 2019 to redemption.

The Existing Bonds were subsequently cancelled by the Issuer. The US\$11.2 million difference between the US\$108.0 million paid to fund the Repurchase Price and the carrying value of the Existing Bonds at redemption was recognized as loss on repurchase of the Existing Bonds (note 9).

The conversion option of the US\$125 million Convertible Bonds represents the fair value of the embedded option for the bondholders to convert into the equity of the Company (the "Conversion Right"). As the Company can elect to pay the cash value in lieu of delivering the Ordinary Shares following the exercise of the Conversion Right the conversion option is a derivative liability. Accordingly, the conversion option is measured at fair value and is presented separately within derivative financial liabilities (note 18) which the fair value loss is included in the net other finance (losses)/ gains (note 9).

As at 31 December 2019, the fair value of debt component of the convertible bonds, considered as Level 3 of the fair value hierarchy, amounted to US\$122.8 million, with the carrying value of US\$109.0 million. Valuation incorporates the following inputs: the Group's credit risk and implied credit spreads, time to maturity and risk-free rate.

As at 31 December 2019, the fair value of the convertible bonds, considered as Level 1 of the fair value hierarchy and calculated by applying the market traded price to the convertible bonds outstanding, amounted to US\$169.1 million.

(c) 31 December 2018: Debt component of the Existing Bonds due on 18 March 2020, measured at amortised cost. The interest charged was calculated by applying an effective interest rate of 13.89% to the liability component.

The conversion option of the US\$100 million Convertible Bonds represents the fair value of the embedded option for the bondholders to convert into the equity of the Company (the "Conversion Right"). As the Company can elect to pay the cash value in lieu of delivering the Ordinary Shares following the exercise of the Conversion Right, the conversion option is a derivative liability. Accordingly, the conversion option is measured at fair value and is presented separately within derivative financial liabilities.

As at 31 December 2018, the fair value of debt component of the convertible bonds, considered as Level 3 of the fair value hierarchy, amounted to US\$86.8 million. Valuation incorporates the following inputs: the Group's credit risk and implied credit spreads, time to maturity and risk-free rate.

As at 31 December 2018, the fair value of the convertible bonds, considered as Level 1 of the fair value hierarchy and calculated by applying the market traded price to the convertible bonds outstanding, amounted to US\$89.2 million.

The US\$100 million Convertible Bonds were refinanced in July 2019 as set out above.

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21. Deferred taxation

	2019 US\$'000	2018 US\$'000
At 1 January	113,354	72,380
Deferred tax (credited)/charged to profit or loss ^(a)	(2,414)	36,628
Deferred tax charged to equity	1,631	4,376
Exchange differences	(5)	(30)
At 31 December	112,566	113,354
Deferred tax liabilities	(112,566)	(113,354)
Net deferred tax liability	(112,566)	(113,354)

(a) [Note 10](#).

	At 1 January 2019 US\$'000	Charged/ (credited) to profit or loss US\$'000	Charged directly to equity US\$'000	Exchange differences US\$'000	At 31 December 2019 US\$'000
Property, plant and equipment	121,800	9,063	–	14	130,877
Inventory	11,264	(2,823)	–	(50)	8,391
Exploration and evaluation assets	7,088	938	–	–	8,026
Other temporary differences	(3,183)	163	1,631	31	(1,358)
Tax losses carried forward ^(a)	(23,615)	(9,755)	–	–	(33,370)
	113,354	(2,414)	1,631	(5)	112,566

(a) *Deferred tax recognised in relation to unused tax losses of JSC Pokrovskiy mine, LLC Malomirskiy Rudnik, LLC TEMI and in-house service companies to the extent that it is either probable that future taxable profit will be available against which the unused tax losses can be utilised or there are sufficient taxable temporary differences.*

	At 1 January 2018 US\$'000	Charged/ (credited) to profit or loss US\$'000	Charged directly to equity US\$'000	Exchange differences US\$'000	At 31 December 2018 US\$'000
Property, plant and equipment	81,836	40,046	–	(82)	121,800
Inventory	8,540	2,958	–	(234)	11,264
Exploration and evaluation assets	8,070	(982)	–	–	7,088
Fair value adjustments	6	(6)	–	–	–
Other temporary differences	(1,494)	(6,351)	4,376	286	(3,183)
Tax losses carried forward ^(b)	(24,578)	963	–	–	(23,615)
	72,380	36,628	4,376	(30)	113,354

(b) *Deferred tax recognised in relation to unused tax losses of LLC Malomirskiy Rudnik and LLC TEMI to the extent that it is either probable that future taxable profit will be available against which the unused tax losses can be utilised or there are sufficient taxable temporary differences.*

As at 31 December 2019, the Group did not recognise deferred tax assets in respect of the accumulated unused tax losses comprising US\$718.8 million (2018: US\$595.4 million) on the basis that there is no certainty about future taxable profit of relevant entities against which the unused tax losses can be utilised or there are insufficient relevant taxable temporary differences. Tax losses of US\$535.4 million (2018: US\$566.0 million) and corporate interest restriction disallowances of US\$155.6 million (2018: US\$117.8 million) arise in the UK and tax losses of US\$26.7 million (2018: US\$28.8 million) arise in Russia, both can be carried forward indefinitely.

As at 31 December 2019, the Group did not recognise deferred tax assets of US\$7.8 million (2018: US\$2.6 million) in respect of deductible temporary differences arising on close down and restoration costs.

The Group has not recorded a deferred tax liability in respect of withholding tax and other taxes that would be payable on the unremitted earnings associated with investments in its subsidiaries and associate as the Group is able to control the timing of the reversal of those temporary differences and does not intend to reverse them in the foreseeable future. As at 31 December 2019, statutory unremitted earnings comprised in aggregate US\$960.1 million (2018: US\$845.3 million).

22. Provision for close down and restoration costs

	2019 US\$'000	2018 US\$'000
At 1 January	21,388	21,004
Unwinding of discount	550	425
Change in estimates ^(a)	14,293	138
Amounts charged against provision	–	(179)
At 31 December	36,231	21,388
Amount due for settlement within 12 months	–	804
Amount due for settlement after 12 months	36,231	20,584
	36,231	21,388

(a) Primarily reflects the effect of change in the forecast the Russian Rouble to the US Dollar exchange rate and the inflation rate.

The Group recognised provisions in relation to close down and restoration costs for the following mining operations:

	2019 US\$'000	2018 ^(a) US\$'000
POX Hub/ Pokrovskiy ^(a)	7,401	6,008
Pioneer	12,864	6,688
Malomir	10,630	4,981
Albyn	5,336	3,711
	36,231	21,388

(a) With the closure of Pokrovskiy mine in 2018, as the site was transformed into a key component of the POX Hub, the associated amounts of close down and restoration costs were attributed to the POX project accordingly.

(b) The allocation of the provisions between the mining operations and the comparative financial information has been updated to align with the 2019 presentation.

The provision recognised represents the present value of the estimated expenditure that will be incurred, which has been arrived at using the long-term risk-free pre-tax cost of borrowing. The expenditure arises at different times over the life of mine. The expected timing of significant cash outflows is between years 2021 and 2038 varying from mine site to mine site.

23. Lease liabilities

The following information is in relation to transactions for which the Group is a lessee (for leases where the Group is a lessor, see [note 29](#)).

Movement in the lease liabilities during the year ended 31 December 2019 was as follows:

	US\$'000
At 1 January 2019	1,739
Additions	13,279
Interest expense	593
Payment of lease liabilities, including interest expense	(1,879)
Disposals	(1,124)
Foreign exchange differences	570
At 31 December 2019	13,178
Amount due for settlement within 12 months	5,373
Amount due for settlement after 12 months	7,805
	13,178

The associated right-of-use assets were measured at the amount equal to the lease liabilities adjusted for prepaid and accrued lease payments in accordance with IFRS 16. The recognised right-of-use assets relate to the rent of office premises and other non-mining assets.

Notes to the Consolidated Financial Statements continued

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23. Lease liabilities continued

The movement in the right-of-use asset during the year ended 31 December 2019 was as follows:

	US\$'000
At 1 January 2019	1,739
Lease assets recognised under IAS 17 as at 31 December 2018	79
Additions	13,279
Disposals	(958)
Depreciation	(2,423)
Translation difference	9
At 31 December 2019	11,725

The statement of profit or loss shows the following amounts relating to leases where the group is a lessee:

	US\$'000
Depreciation charge of right-of-use assets	2,423
Interest expense	593
Expense relating to short-term leases	2,169
Expense relating to leases of low value that are not shown above as short-term leases	49

24. Share capital

	2019		2018	
	No of shares	US\$'000	No of shares	US\$'000
Allotted, called up and fully paid				
At 1 January	3,307,151,712	48,963	3,303,768,532	48,920
Issued during the period	3,058,569	40	3,383,180	43
At 31 December	3,310,210,281	49,003	3,307,151,712	48,963

The Company has one class of ordinary shares which carry no right to fixed income.

25. Notes to the cash flow statement

Reconciliation of profit before tax to operating cash flow

	2019 US\$'000	2018 US\$'000
Profit before tax	52,939	82,418
Adjustments for:		
Share of results of associate	35,376	(15,480)
Net (impairment reversals)/impairment losses on financial instruments	(30,797)	28,634
Investment and other finance income	(8,826)	(3,775)
Interest expense	59,854	29,520
Net other finance losses/(gains)	42,190	(10,185)
Share based payments	280	416
Depreciation	137,775	142,003
Impairment of exploration and evaluation assets	–	12,192
(Reversal of impairment)/impairment of ore stockpiles	(2,778)	18,021
Effect of processing previously impaired stockpiles	(6,398)	(10,496)
Provision for impairment of trade and other receivables	2,280	1,435
Impairment of gold in circuit	142	2,124
Effect of processing previously impaired gold in circuit	(1,413)	(3,384)
Loss/(gain) on disposals of property, plant and equipment	1,118	(862)
Foreign exchange losses/(gains)	20,808	(8,450)
Reversal of impairment of mining assets and in-house service	(52,159)	(101,695)
Other non-cash items	129	(106)
Changes in working capital:		
Increase in trade and other receivables	(31,204)	(18,510)
Increase in inventories	(133,848)	(18,833)
Increase in trade and other payables	103,853	204,827
Net cash generated from operations	189,321	329,814

Reconciliation of cash flows used to purchase property, plant and equipment

	2019 US\$'000	2018 US\$'000
Additions to property, plant and equipment	125,524	174,241
Non-cash additions to property, plant and equipment:		
Transfer from materials	7,343	(747)
Capitalised depreciation	(737)	(293)
Right-of-use assets additions	(13,279)	(55)
	118,851	173,146
Associated cash flows:		
Purchase of property, plant and equipment	120,798	178,201
Increase in prepayments for property, plant and equipment	(1,982)	(1,419)
(Decrease)/increase in payables for property, plant and equipment	568	(5,147)
Cash movements presented in other cash flow lines:		
Changes in working capital	(533)	1,511
	118,851	173,146

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

25. Notes to the cash flow statement (continued)

Non-cash transactions

An equivalent of US\$0.1 million of VAT recoverable was offset against profit tax during the year ended 31 December 2019 and US\$1.5 million of provision of profit tax relating to Albyn, was accrued as at 31 December 2019. An equivalent of US\$8.0 million of VAT recoverable was offset against profit tax during the year ended 31 December 2018. There were no other significant non-cash transactions during the years ended 31 December 2019 and 2018.

26. Related parties

Related parties the Group entered into transactions with during the reporting period

The Petropavlovsk Foundation for Social Investment (the 'Petropavlovsk Foundation') is considered to be a related party due to the participation of the key management of the Group in the board of directors of the Petropavlovsk Foundation.

IRC Limited and its subsidiaries ([note 33](#)) are associates to the Group and hence are related parties since 7 August 2015.

Transactions with related parties which the Group entered into during the years ended 31 December 2019 and 2018 are set out below.

Trading Transactions

Related party transactions the Group entered into that relate to the day-to-day operation of the business are set out below.

	Sales to related parties		Purchases from related parties	
	2019 US\$'000	2018 US\$'000	2019 US\$'000	2018 US\$'000
Entities in which key management have interest and exercise a significant influence or control	–	–	4,046	764
IRC Limited and its subsidiaries	42	164	5,458	681
	42	164	9,504	1,445

In March 2018, the Group entered into a transaction with the member of key management personnel to purchase the office building and land, which were subject to an operating lease arrangement. The aggregate consideration paid was an equivalent of c. US\$3.2 million. The transaction was completed in February 2019.

On 13 December 2019, the Group entered into the sale and purchase agreement with a seller (the "Seller"), a related party of the Company, LLC GMMC. Pursuant to the sale and purchase agreement, the Group agreed to purchase, and the Seller agreed to sell, a helicopter for a consideration of RUB316.7 million (equivalent to US\$5.0 million). At 31 December 2019, the contractual balance outstanding amounted to US\$4.5 million.

During the year ended 31 December 2019, the Group made US\$1.0 million charitable donations to the Petropavlovsk Foundation (2018: US\$0.4 million).

The outstanding balances with related parties at 31 December 2019 and 2018 are set out below.

	Amounts owed by related parties		Amounts owed to related parties	
	2019 US\$'000	2018 US\$'000	2019 US\$'000	2018 US\$'000
Entities in which key management have interest and exercise a significant influence or control	–	1,556	759	–
IRC Limited and its subsidiaries	3,651	2,078	5,863	976
	3,651	3,634	6,622	976

Financing transactions

Guarantee over IRC's external borrowings

The Group historically entered into an arrangement to provide a guarantee over its associate's, IRC, external borrowings, the ICBC Facility ('ICBC Guarantee'). At 31 December 2018 the principal amounts outstanding subject to the ICBC guarantee were US\$169.6 million. Under the terms of the arrangement the Group was entitled to receive an annual fee equal to 1.75% of the outstanding amount, which amounted to US\$0.7 million during the year ended 31 December 2019 (31 December 2018: US\$4.0 million).

In March 2019, IRC has refinanced the ICBC Facility through entering into a US\$240 million new facility with Gazprombank ('Gazprombank Facility'). The facility was fully drawn down during the year ended 31 December 2019 and was used, inter alia, to repay the amounts outstanding under the ICBC Facility in full, the two loans provided by the Group in the equivalent of approximately US\$57 million and part of the ICBC Guarantee fee of US\$6 million owed by IRC to the Group. At 31 December 2019 the remaining outstanding contractual guarantee fee

was US\$5.0 million, which had a corresponding fair value of US\$4.4 million and is payable by IRC no later than 31 December 2020 (31 December 2018: outstanding contractual guarantee fee of US\$10.3 million with a corresponding fair value of US\$6.8 million).

26. Related parties continued

A new guarantee was issued by the Group over part of the Gazprombank Facility ('Gazprombank Guarantee'), the guarantee mechanism is implemented through a series of five guarantees that fluctuate in value through the eight-year life of the loan, with the possibility of the initial US\$160 million principal amounts guaranteed reducing to US\$40 million within two to three years, subject to certain conditions being met. For the final two years of the Gazprombank Facility, the guaranteed amounts will increase to US\$120 million to cover the final principal and interest repayments. If certain springing

recourse events transpire, including default on a scheduled payment, then full outstanding loan balance is accelerated and subject to the guarantee. The outstanding loan principal was US\$225 million as at 31 December 2019. Under the Gazprombank Guarantee arrangements, the guarantee fee receivable is determined at each reporting date on an independently determined fair value basis, which for the year ended 31 December 2019 was at the annual rate of 3.07% for 2019 by reference to the average outstanding principal balance under Gazprombank Facility. The guarantee fee

charged for 2019 was US\$5.6 million, with corresponding value of US\$5.0 million after provision for expected credit losses.

On 18 March 2020, the Group announced a preliminary agreement to dispose of its 29.9% out of 31.1% interest in IRC to Stocken Board AG for a cash consideration of US\$10 million, subject to certain conditions precedent being met, including the release of the Group's obligation to guarantee IRC's debt under the Gazprombank Facility ([note 31](#)).

The following assets and liabilities have been recognised in relation to the ICBC Guarantee and Gazprombank Guarantee as at 31 December 2019 and 31 December 2018:

	31 December 2019 US\$'000	31 December 2018 US\$'000
Other receivables – ICBC Guarantee ^(a)	4,436	6,829
Other receivables – Gazprombank Guarantee ^(b)	4,981	–
Financial guarantee contract – ICBC Guarantee ^(c)	–	37,387
Financial guarantee contract – Gazprombank Guarantee ^(d)	8,923	–

(a) The fair value of the receivable, comprising billed fee receivable (31 December 2018: both billed and future fee receivable), less provision for credit losses. Considered Level 3 of the fair value hierarchy which valuation incorporates the following inputs:

- Assessment of the credit standing of IRC and implied credit spread;
- Share price and share price volatility of IRC as at 31 December 2019 and 2018;

(b) Amounts of guarantee fee for the period that are expected to be received from IRC and calculated by applying annual rate of 3.07% for 2019 by reference to the average outstanding principal balance under Gazprombank Facility for the period from 19 March 2019 until 31 December 2019, less provision for ECL.

(c) Measured in accordance with ECL model: the amount of the loss allowance equals to the lifetime ECL as it has been concluded that the credit risk on the financial guarantee contract had increased significantly since initial recognition, which reflected declining credit status of IRC prior to the refinancing through Gazprombank Facility completed in March 2019.

(d) Measured in accordance with ECL model: the amount of the loss allowance equals to 12-month ECL as it has been concluded that the credit risk on the financial guarantee contract has not increased significantly since initial recognition ([note 3.1](#))

The results from relevant re-measurements of the aforementioned assets and liabilities were recognised within Other finance gains and losses and impairments of financial instruments ([note 9](#)).

Loans issued to IRC

In June 2018, the Group provided a Rouble denominated unsecured loan to IRC in the amount of RUB1,878 million (an equivalent of US\$29.75 million). The loan carried interest of 12% per annum. The loan was recognised net of lifetime ECL of US\$0.5 million at inception and further US\$0.8 million impairment based on ECL model was recognised during the year ended 31 December 2018. The loan was fully repaid in March 2019 with consequent reversal of US\$1.3 million previously recognised ECL ([note 9](#)).

In December 2018, the Group provided a dollar denominated unsecured loan to IRC in the amount of US\$27.0 million. The loan carried interest of 16% per annum. The loan was recognised net of lifetime ECL of US\$1.9 million

at inception. The loan was fully repaid in March 2019 with consequent reversal of US\$1.9 million previously recognised ECL ([note 9](#)).

Other financing transactions

In March 2018, the Group entered into a loan agreement with Dr Pavel Maslovskiy. At 31 December 2019, the loan principal outstanding amounted to an equivalent of US\$0.2 million (2018: US\$0.2 million). Interest charged during the year ended 31 December 2019 comprised an equivalent of US\$0.01 million (2018: US\$0.01 million).

In April 2019, the Group entered into a loan agreement with Dr Alya Samokhvalova. At 31 December 2019, the loan principal outstanding amounted to an equivalent of US\$0.4 million. Interest charged during the year ended 31 December 2019 comprised an equivalent of US\$0.01 million.

Investing transactions

In May 2019, the Group entered into the option contract to acquire the remaining

non-controlling 25% interest in the subsidiary LLC TEMI from Agestinia Trading Limited, a non-controlling holder of 25% interest in LLC TEMI, for an aggregate consideration of US\$60 million (adjusted to US\$53.5 million if certain conditions are met). This represents a related party transaction as it is over the equity of a subsidiary company. The option premium payable is US\$13 million, which was paid during the year ended 31 December 2019. The exercise period of the option is 730 days from 22 May 2019.

The Group employed an independent third-party expert to undertake the valuations of the underlying 25% interest in LLC TEMI and the call option. As at 31 December 2019, the fair value of the derivative financial asset was US\$11.0 million reflecting a loss on re-measurement to fair value of US\$2.0 million and the initial US\$13 million cash payment ([note 18](#)).

There are no other related party relationships with Agestinia Trading Limited present.

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26. Related parties continued

Key management compensation

Key management personnel, comprising a group of 14 individuals during the period (2018: 16), including Executive and Non-Executive Directors of the Company and members of senior management, are those having authority and responsibility for planning, directing and controlling the activities of the Group.

	2019 US\$'000	2018 US\$'000
Wages and salaries	5,794	7,761
Pension costs	62	136
Share-based compensation	157	404
	6,013	8,301

27. Analysis of Net debt*

	At 1 January 2019 US\$'000	Net cash movement US\$'000	Exchange movement US\$'000	Non-cash changes US\$'000	At 31 December 2019 US\$'000
Cash and cash equivalents	26,152	19,630	2,371	–	48,153
Borrowings	(594,177)	38,128 ^(a)	–	(53,414) ^(b)	(609,463)
Net debt*	(568,025)	57,758	2,371	(53,414)	(561,310)
Lease liabilities ^(c)	(1,739)	1,879	(570)	(12,748)	(13,178)
Conversion option ^(d)	(2,411)	–	–	(43,902)	(46,313)
Call option over Company's shares	(1,136)	2,215	–	(1,079)	–
	(573,311)	61,852	1,801	(111,143)	(620,801)

(a) Being US\$50.7 million interest paid on borrowings, which is presented as operating cash flows in the Statement of cash flows, and US\$12.6 million net cash inflow from the issue of US\$125 million Convertible Bonds and the repurchase of the outstanding US\$100 million convertible bonds (note 20).

(b) Being principally accrued interest expense which is presented as operating cash flows in the Statement of cash flows when paid (note 9).

(c) Note 23.

(d) Notes 18, 20 and 28.

	At 1 January 2018 US\$'000	Net cash movement US\$'000	Exchange movement US\$'000	Non-cash changes US\$'000	At 31 December 2018 US\$'000
Cash and cash equivalents	11,415	17,719	(2,982)	–	26,152
Borrowings	(596,474)	57,845 ^(e)	–	(55,548) ^(f)	(594,177)
Net debt*	(585,059)	75,564	(2,982)	(55,548)	(568,025)
Conversion option ^(g)	(14,110)	–	–	11,700	(2,411)
Call option over Company's shares	(3,097)	–	–	1,961	(1,136)
	(602,266)	75,564	(2,982)	(41,887)	(571,572)

(e) Being US\$53.8 million interest paid on borrowings, which is presented as operating cash flows in the Statement of cash flows, and US\$4.0 million repayment of bank loan.

(f) Being accrued interest expense which is presented as operating cash flows in the Statement of cash flows when paid (note 9).

(g) Notes 18, 20 and 28.

* Net debt is an Alternative Performance Measure (APM), which is not defined or calculated in accordance with IFRS. Go to "The Use and Application of Alternative Performance Measures (APMs)" section on pages 256 to 262 for further information on our APMs.

28. Financial instruments and financial risk management

Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to optimise the weighted average cost of capital and tax efficiency subject to maintaining sufficient financial flexibility to undertake its investment plans.

The capital structure of the Group consists of Net debt* (as detailed in [note 27](#)) and equity (comprising issued capital, reserves and retained earnings). As at 31 December 2019, the capital comprised US\$1.2 billion (2018: US\$1.2 billion).

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt. The Group adopts a modular approach in developing its projects in order to minimise upfront capital expenditure and related funding requirements. The Group manages in detail its funding requirements on a 12-month rolling basis and maintains a five-year forecast in order to identify medium-term funding needs.

The Group is not subject to any externally imposed capital requirements.

As at 31 December 2019, there are no material offsetting contracts (2018: none).

Significant accounting policies

Details of significant accounting policies and methods adopted, including the criteria for recognition, the basis of measurement and the basis on which income and expenses are recognised, in respect of each class of financial asset, financial liability and equity instrument are disclosed in [note 2](#) to the consolidated financial statements.

Categories of financial instruments

	2019 US\$'000	2018 US\$'000
Financial assets		
Financial assets at amortised cost		
Cash and cash equivalents	48,153	26,152
Trade receivables and contract assets	13,110	13,389
Loans granted to an associate	–	50,966
Other financial assets at amortised cost	10,441	5,271
Financial assets at FVPL		
Guarantee fee receivable	4,436	6,829
Listed equity securities	286	590
Derivative financial instruments	11,022	–
Financial liabilities		
Financial liabilities at amortised cost		
Trade and other payables	143,706	58,343
Borrowings	609,463	594,177
Lease liabilities	13,178	–
Derivative financial instruments	46,579	12,366
Financial guarantee contract	8,923	37,387

Notes to the Consolidated Financial Statements continued

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28. Financial instruments and financial risk management continued

Fair value measurements

Recurring fair value measurements are set out below.

31 December 2019	Level 1 US\$'000	Level 2 US\$'000	Level 3 US\$'000	Total US\$'000
Financial assets				
Financial assets at FVPL:				
Guarantee fee receivable	–	–	4,436	4,436
Listed equity securities	286	–	–	286
Call option over non-controlling interests	–	–	11,022	11,022
Total financial assets	286	–	15,458	15,694
Financial liabilities				
Conversion option	–	–	46,313	46,313
Other	–	266	–	266
Total financial liabilities	–	266	46,313	46,579

31 December 2018	Level 1 US\$'000	Level 2 US\$'000	Level 3 US\$'000	Total US\$'000
Financial assets				
Financial assets at FVPL:				
Guarantee fee receivable	–	–	6,829	6,829
Listed equity securities	590	–	–	590
Total financial assets	590	–	6,829	7,419
Financial liabilities				
Forward gold contracts – cash flow hedge	–	8,819	–	8,819
Call Option over the Company's shares	–	1,136	–	1,136
Conversion option	–	–	2,411	2,411
Total financial liabilities	–	9,955	2,411	12,366

There were no transfers between Levels 1, 2 and 3 for recurring fair value measurements during the year.

The changes in Level 3 items for the periods ended 31 December 2019 and 31 December 2018 are set out in the table below:

	Guarantee fee receivable US\$'000	Call option over non- controlling interests US\$'000	Conversion option US\$'000	Total US\$'000
1 January 2018	10,549	–	(14,110)	(3,561)
Gains/ (losses) recognised in net other finance gains/ (losses) (note 9)	(3,720)	–	11,700	7,980
31 December 2018	6,829	–	(2,411)	4,418
Purchases	–	13,000 ^(a)	–	13,000
Cash settlements	(6,000) ^(a)	–	–	(6,000)
Issue of convertible bonds (note 20)	–	–	(12,775)	(12,775)
Gains/ (losses) recognised in net other finance gains/ (losses) (note 9)	3,607	(1,978)	(31,127)	(29,498)
31 December 2019	4,436	11,022	(46,313)	(30,855)

(a) Note 20.

28. Financial instruments and financial risk management continued

Valuation inputs and relationships to fair value

The quantitative information about the significant unobservable inputs used in level 3 fair value measurements is set out in the table below:

	Fair value at 31 December		Unobservable inputs	Range of inputs	Relationship of unobservable inputs to fair value
	2019 US\$'000	2018 US\$'000			
Guarantee fee receivable (note 26)	4,436	6,829	– Implied credit spread; – 2018: likelihood of the proposed refinancing of IRC's debt being achieved	– 12.4% (2018:12.3%); – 2018: 72.4%	a reasonable change in unobservable inputs has been assessed to not result in a significantly different fair value measurement
Call option over non-controlling interests (notes 18, 26)	11,022	–	– The current valuation of the underlying investment; and – Historic peers' volatility attributed to the valuation of the underlying investment	– US\$71 million; – 40%	a reasonable change in unobservable inputs has been assessed to not result in a significantly different fair value measurement
Conversion option – US\$125 million convertible bonds due in 2025 (note 20)	(46,313)	–	– The Group's credit risk and implied credit spreads	– 7.25%	1% increase in credit spread would result in US\$4.2 million increase in fair value
Conversion option – US\$100 million convertible bonds due in 2020 (note 20)	–	(2,411)	– The Group's credit risk and implied credit spreads	– 10.5%	a reasonable change in unobservable inputs has been assessed to not result in a significantly different fair value measurement

Valuation processes

The Group employed independent third-party experts to undertake valuations of all Level 3 financial instruments.

Financial risk management

The Group's activities expose it to interest rate risk, foreign currency risk, risk of change in the commodity prices, credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

Risk management is carried out by a central finance department and all key risk

management decisions are approved by the Board of Directors. The Group identifies and evaluates financial risks in close cooperation with the Group's operating units. The Board provides written principles for overall risk management, as well as guidance covering specific areas, such as foreign exchange risk, interest rate risk, gold price risk, credit risk and investment of excess liquidity.

Interest rate risk

The Group has borrowings with fixed rate, which are carried at amortised cost. They are therefore not subject to interest rate risk as defined in IFRS 7, since neither the carrying amount nor the future cash flows will fluctuate because of a change in market interest rates.

The Group does not have borrowings with variable interest rates.

Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from fluctuations in currencies the Group transacts, primarily US Dollars, GB Pounds Sterling and Russian Roubles.

Exchange rate risks are mitigated to the extent considered necessary by the Board of Directors, through holding the relevant currencies. At present, the Group does not undertake any foreign currency transaction hedging.

The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities at period end are set out below.

	Assets		Liabilities	
	2019 US\$'000	2018 US\$'000	2019 US\$'000	2018 US\$'000
Russian Roubles	86,581	66,285	165,473	54,757
US Dollars ^(a)	10,759	4,652	4,169	5,886
GB Pounds Sterling	1,252	1,905	759	1,033
EUR	22	22	603	2,301
Other currencies	10	159	267	312

(a) US Dollar denominated monetary assets and liabilities in Group companies with Rouble functional currency.

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28. Financial instruments and financial risk management continued

The table set out below illustrates the Group's profit sensitivity to changes in exchange rates by 25% (2018: 25%), representing management's assessment of a reasonably possible change in foreign exchange currency rates. The analysis was applied to monetary assets and liabilities at the reporting dates denominated in respective currencies.

	2019 US\$'000	2018 US\$'000
Russian Rouble currency impact	19,723	2,882
US Dollar currency impact	1,647	309
GB Pounds Sterling currency impact	123	218
EUR currency impact	145	570
Other currencies	64	38

Credit risk

The Group's principal financial assets are cash and cash equivalents, comprising current bank accounts and amounts held on deposit with banks. In the case of deposits, the Group is exposed to a credit risk, which results from the non-performance of contractual agreements on the part of the contract party. The Group is also exposed to a credit risk in relation to the amounts guaranteed under the Gazprombank Facility (notes 14 and 26).

The Group's maximum exposure to credit risk is limited to the carrying amounts of the financial assets recorded in the consolidated financial statements as set out above and the US\$225 million outstanding principal under the Gazprombank Facility (notes 14 and 26).

The major financial assets are cash and cash equivalents of US\$48.2 million (2018: US\$26.2 million) and receivables from IRC with an aggregate carrying value of US\$12.3 million (2018: US\$58.9 million)

(note 26). There is no significant concentration of credit risk with respect to trade receivables and contract assets. The credit risk on cash and cash equivalents is limited because the main counterparties are banks with high credit-ratings assigned by international credit-rating agencies as set out below. As at 31 December 2019, the credit rating for IRC, calculated as shadow credit rating using a Moody's scorecard methodology, was Caa2.

Counterparty	Credit rating	Carrying amount at 31 December 2019 US\$'000	Carrying amount at 31 December 2018 US\$'000
Gazprombank	BBB-	28,616	-
Sberbank	BBB	8,501	598
VTB	BBB-	5,936	14,841
Citibank	AA-	2,073	8,011
Barclays	A+	719	337
Raiffeisen	BBB	1,051	872
Other		1,257	1,493
		48,153	26,152

The analysis of loss allowances that have been recognised for financial assets and financial guarantee contracts is set out below:

	Trade receivables and contract assets US\$'000	Loans granted to an associate US\$'000	Other financial assets at amortised cost US\$'000	Financial guarantee contract US\$'000	Total US\$'000
Loss allowance at 1 January 2019	891	3,163	1,128	37,387	42,569
Increase in loss allowance	421	-	1,326	8,923	10,670
Written off during the year	(90)	-	-	-	(90)
Unused amount reversed	-	(3,163)	-	(37,387)	(40,550)
Exchange differences	(3)	-	(84)	-	(87)
Loss allowance at 31 December 2019	1,219	-	2,370	8,923	12,512

28. Financial instruments and financial risk management continued

Commodity price risk

The Group generates most of its revenue from the sale of gold. The Group's policy is to sell its products at the prevailing market price. In 2019 and 2018, the Group has entered into gold forward contracts to protect cash flows from the volatility in the gold price ([note 18](#)).

Liquidity risk

Liquidity risk is the risk that suitable sources of funding for the Group's business activities may not be available. The Group constantly

monitors the level of funding required to meet its short, medium and long-term obligations. The Group also monitors compliance with restrictive covenants set out in various loan agreements ([note 20](#)) to ensure there is no breach of covenants resulting in associated loans become payable immediately.

Effective management of liquidity risk has the objective of ensuring the availability of adequate funding to meet short-term requirements and due obligations as well as the objective of ensuring a sufficient level of flexibility in order to fund the development plans of the Group's businesses.

The table below details the Group's remaining contractual maturity for its financial liabilities with agreed repayment periods. The amounts disclosed are the contractual undiscounted cash flows and so these balances will not necessarily agree with the amounts disclosed in the statement of financial position. The contractual maturity is based on the earliest date on which the Group may be required to pay.

	0 - 3 months US\$'000	3 months - 1 year US\$'000	1 - 2 years US\$'000	2 - 3 years US\$'000	3 - 6 years US\$'000
2019					
Borrowings					
- Convertible bonds	–	–	–	–	125,000
- Notes	–	–	–	500,000	–
Future interest payments ^(a)	–	48,359	50,938	50,938	18,047
Trade and other payables	106,353	37,353	–	–	–
Lease liabilities	1,724	4,203	5,578	2,491	357
Financial guarantee contract ^(b)	225,000	–	–	–	–
Total non-derivative financial liabilities	333,077	89,915	56,516	553,429	143,404
Other	266	–	–	–	–
Total derivative financial liabilities	266	–	–	–	–
2018					
Borrowings					
- Convertible bonds	–	–	100,000	–	–
- Notes	–	–	–	–	500,000
Future interest payments ^(a)	2,250	47,375	42,875	40,625	40,625
Trade and other payables	31,506	26,837	–	–	–
Financial guarantee contract	–	169,600	–	–	–
Total non-derivative financial liabilities	33,756	243,812	142,875	40,625	540,625
Forward gold contracts – cash flow hedge	1,536	7,283	–	–	–
Call Option over the Company's shares	1,136	–	–	–	–
Total derivative financial liabilities	2,672	7,283	–	–	–

(a) Future interest payments have been estimated using interest rates applicable at 31 December. There are no borrowings that are subject to variable interest rates and, therefore, subject to change in line with the market rates.

(b) [Note 26](#)

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

29. Operating lease arrangements

The Group as a Lessee (applicable prior to 1 January 2019)

The group adopted IFRS 16 on 1 January 2019 and recognised a right-of-use asset and lease liability (note 23). For the year ended 31 December 2018, the Group incurred rental expense, primarily associated with rent of office premises and rent of mining fleet, as set out below.

	2018 US\$'000
Minimum lease payments under operating leases recognised as an expense in the year	3,757

At 31 December 2018, the Group had outstanding commitments for future minimum lease payments under a non-cancellable operating lease for office premises and vehicles, which fall due as follows:

	2018 US\$'000
Expiring:	
Within one year	929
In two to five years	468
	1,397

The Group as a Lessor

The Group earned property rental income during the year of US\$0.7 million (2018: US\$0.7 million) on buildings owned by its subsidiary Irgiredmet.

30. Capital commitments

At 31 December 2019, the Group had entered into contractual commitments in relation to the acquisition of property, plant and equipment amounting to US\$10.7 million (31 December 2018: US\$9.5 million) including US\$7.4 million in relation to Pioneer Flotation project (31 December 2018: nil) and US\$2.5 million in relation to POX Hub project (31 December 2018: US\$6.8 million).

Investment agreement with the Russian Ministry of Far East Development

On 14 December 2015, the Group entered into an investment agreement with the Russian Ministry of Far East Development (the 'Investment Agreement'). The Investment Agreement involved provision of RUB5.5 billion (an equivalent to c.US\$89 million as at 31 December 2019) funding towards the construction of the electricity power line in the north-east of the Amur region of Russia, where the Group's Albyn and Malomir mines and adjacent licence areas are operated, during the period from 2015 to 2019. The funds were passed through the Group to the joint-stock company Far East Grid Distribution Company ('DRSK'), which was required to engage a contractor to build the relevant power supply infrastructure. The Group's responsibility under the Investment

Agreement was to monitor the progress and to report to the Russian Ministry of Far East Development. The Group was taking ultimate responsibility for the construction of the power line. Upon completion in November 2019, the Group got access to the enhanced capacity of the power supply infrastructure in the region. Under the terms of the Investment Agreement, the Group has certain capital commitments, including further development of Albyn and Malomir mines.

During 2019, the Group received RUB549 million (an equivalent to US\$8.8 million) in funding and transferred these funds to DRSK (2018: the Group did not receive and made no transfers of funds under the Investment Agreement).

31. Subsequent events

COVID-19

In the period subsequent to the 31 December 2019, the COVID-19 virus has spread globally although there has been no significant impact on the Group's mining operations, sales and supply chain, capital projects or employee health and safety as a result of COVID-19 to date. Further details are set out on [page 6](#) of this Annual Report.

The effects of COVID-19 and the marked decline in the oil price have contributed to a significant increase in the gold price and a significant decline in the Rouble exchange rate.

Preliminary agreement to dispose 29.9% interest in IRC

On 18 March 2020, the Group announced a preliminary agreement to dispose of 29.9% out of 31.1% interest in IRC to Stocken Board AG for a cash consideration of US\$10 million,

subject to certain conditions precedent being met, including the release of the Group's obligation to guarantee IRC's debt under the Gazprombank Facility ([note 26](#)). This was a non-adjusting event and the investment was not considered to be an asset held-for-sale under IFRS 5 as at 31 December 2019. The rationale to support the transaction at the above terms was removal of the Gazprombank Guarantee and the risks associated with the guarantee arrangements.

32. Reconciliation of non-GAAP measures (unaudited)

	2019 US\$'000	2018 (restated) US\$'000
Profit for the year	25,693	25,929
Add/(less):		
Net (impairment reversals)/impairment losses on financial instruments	(30,797)	28,634
Investment and other finance income	(8,826)	(3,775)
Interest expense	59,854	29,520
Net other finance losses/(gains)	42,190	(10,185)
Foreign exchange losses/(gains)	20,808	(8,450)
Taxation	27,246	56,489
Depreciation	137,775	142,003
Reversal of impairment of mining assets and in-house service	(52,159)	(101,695)
Impairment of exploration and evaluation assets	–	12,192
(Reversal of impairment)/impairment of ore stockpiles	(2,778)	18,021
Impairment of gold in circuit	142	2,125
Share of results of associate ^(a)	45,699	(8,065)
Underlying EBITDA [♦]	264,847	182,743

(a) Group's share of interest expense, investment income, other finance gains and losses, foreign exchange gains/losses, taxation, depreciation and impairment/reversal of impairment recognised by the associate and impairment recognised against investment in the associate ([note 14](#)).

♦ Underlying EBITDA is an Alternative Performance Measure (APM), which is not defined or calculated in accordance with IFRS. Go to "The Use and Application of Alternative Performance Measures (APMs)" section for further information on our APMs.

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

33. Principal subsidiaries and other significant investments

The Group has the following principal subsidiaries and other significant investments, which were consolidated in this financial information.

Principal subsidiary, joint venture and associate undertakings	Country of incorporation	Principal activity	Proportion of shares held by Petropavlovsk PLC ^(a)		Proportion of shares held by the Group ^(a)	
			31 December 2019	31 December 2018	31 December 2019	31 December 2018
Subsidiary						
JSC Management Company Petropavlovsk	Russia	Management company	100%	100%	100%	100%
Petropavlovsk 2010 Limited	Jersey	Finance company	100%	100%	100%	100%
Petropavlovsk 2016 Limited	Jersey	Finance company	100%	100%	100%	100%
JSC Pokrovskiy mine	Russia	Gold exploration and production	19.37%	19.37%	99.38%	99.38%
LLC Malomirskiy Rudnik	Russia	Gold exploration and production	–	–	99.94%	99.94%
LLC Albynskiy Rudnik	Russia	Gold exploration and production	100%	–	100%	100%
LLC Osipkan	Russia	Gold exploration and production	–	–	100%	100%
LLC Tokurskiy Rudnik	Russia	Gold exploration and production	–	–	100%	100%
LLC TEMI	Russia	Gold exploration and production	–	–	75%	75%
LLC AGPK	Russia	Gold exploration and production	–	–	99.38%	99.38%
LLC Perspektiva DV	Russia	Gold exploration and production	–	–	99.94%	99.94%
LLC Vostok Geologiya	Russia	Gold exploration and production	–	–	99.94%	99.94%
Universal Mining Inc.	Guyana	Gold exploration and production	–	–	100%	100%
LLC Kapstroj	Russia	Construction services	–	–	100%	100%
LLC NPGF Regis	Russia	Exploration services	–	–	100%	100%
CJSC ZRK Dalgeologiya	Russia	Exploration services	–	–	99.38%	99.38%
JSC PHM Engineering	Russia	Project and engineering services	–	–	94%	94%
JSC Irgiredmet	Russia	Research services	–	–	99.69%	99.69%
LLC NIC Gydrometallurgija	Russia	Research services	–	–	100%	100%
LLC BMRP	Russia	Repair and maintenance	–	–	100%	100%
LLC AVT-Amur	Russia	Production of explosive materials	–	–	49%	49%
LLC Transit	Russia	Transportation services	–	–	100%	100%
Pokrovskiy Mining College	Russia	Educational institute	–	–	99.38%	99.38%
Associate						
IRC Limited ^(b)	HK	Management and holding company	–	–	31.10%	31.10%

(a) In the ordinary class of shares.

(b) IRC Limited and its principal subsidiary and joint venture undertakings.



33. Principal subsidiaries and other significant investments continued

Principal subsidiary, joint venture and associate undertakings	Country of incorporation	Principal activity	Proportion of shares held by Petropavlovsk PLC ^(a)		Proportion of shares held by the Group ^(a)	
			31 December 2019	31 December 2018	31 December 2019	31 December 2018
IRC and its principal subsidiary and joint venture undertakings ('IRC')						
IRC Limited	HK	Management and holding company	–	–	31.10%	31.10%
<i>Principal subsidiaries of IRC</i>						
LLC Petropavlovsk-Iron Ore	Russia	Management company	–	–	31.10%	31.10%
LLC Olekminsky Rudnik	Russia	Iron ore exploration and production	–	–	31.10%	31.10%
LLC KS GOK	Russia	Iron ore exploration and production	–	–	31.10%	31.10%
LLC Garinsky Mining & Metallurgical Complex	Russia	Iron ore exploration and production	–	–	30.97%	30.97%
LLC Kostenginskiy GOK	Russia	Iron ore exploration and production	–	–	31.10%	31.10%
LLC Orlovsko-Sokhatinskiy Rudnik	Russia	Iron ore exploration and production	–	–	31.10%	31.10%
JSC Giproruda	Russia	Engineering services	–	–	21.85%	21.85%
LLC SHMTP	Russia	Infrastructure project	–	–	31.10%	31.10%
LLC Amursnab	Russia	Procurement services	–	–	31.07%	31.07%
Heilongjiang Jiatal Titanium Co., Limited	China	Titanium sponge project	–	–	31.10%	31.10%
LLC Uralmining	Russia	Iron ore exploration and production	–	–	31.10%	31.10%
LLC Gorniy Park	Russia	Molybdenum project	–	–	18.75%	18.75%
<i>Joint ventures of IRC</i>						
Heilongjiang Jianlong Vanadium Industries Co., Limited	China	Vanadium project	–	–	14.31%	14.31%

(a) In the ordinary class of shares.

Notes to the Consolidated Financial Statements continued

For the year ended 31 December 2019

34. Related undertakings of the Group

The Group consists of the parent company, Petropavlovsk PLC, incorporated in the United Kingdom and its subsidiaries, associates and joint ventures. In accordance with Section 409 of the Companies Act 2006 a full list of related undertakings, the country of incorporation and the effective percentage of equity owned as at 31 December 2019 is disclosed below. The Group's principal subsidiaries and other significant investments are set out in [note 33](#).

Name of undertaking	Country of incorporation	Proportion of shares held by the Group ^(a)	Registered address
Subsidiaries			
Eponymousco Limited	UK	100%	11 Grosvenor Place, London, SW1X 7HH
Victoria Resources Limited	UK	100%	11 Grosvenor Place, London, SW1X 7HH
Petropavlovsk Mining Treasury UK Limited	UK	100%	11 Grosvenor Place, London, SW1X 7HH
Petropavlovsk Rouble Treasury Limited	UK	100%	11 Grosvenor Place, London, SW1X 7HH
Petropavlovsk Dollar Treasury Limited	UK	100%	11 Grosvenor Place, London, SW1X 7HH
Petropavlovsk 2010 Limited	Jersey	100%	13-14 Esplanade, St. Helier, JE1 1EE
Petropavlovsk 2016 Limited	Jersey	100%	13-14 Esplanade, St. Helier, JE1 1EE
JSC Management Company Petropavlovsk	Russia	100%	675000, Amur region, Blagoveschensk, Lenina Street, 140/1
JSC Pokrovskiy mine	Russia	99.38%	676150, Amur region, Magdagachinskiy District, Tygda Village, Sovetskaya Street, 17
LLC Malomirskiy Rudnik	Russia	99.94%	675000, Amur region, Blagoveschensk, Lenina Street, 140/1
LLC Albynskiy Rudnik	Russia	100%	675000, Amur region, Blagoveschensk, Lenina Street, 140/1
LLC Osipkan	Russia	100%	675000, Amur region, Blagoveschensk, Lenina Street, 140/1
LLC Tokurskiy Rudnik	Russia	100%	676581, Amur region, Selemdzhinskiy District, Tokur Village, Vorozhejkina Street, 16
LLC TEMI	Russia	75%	675000, Amur region, Blagoveschensk, Lenina Street, 140/1
LLC AGPK	Russia	99.38%	675000, Amur region, Blagoveschensk, Lenina Street, 140/1
LLC Perspektiva DV	Russia	99.94%	680021, Khabarovskiy region, Khabarovsk, Vladivostokskaya Street, 22, build.3, office 11
LLC Vostok Geologiya	Russia	99.94%	680021, Khabarovskiy region, Khabarovsk, Vladivostokskaya Street, 22, build.3, office 9
LLC Kapstroj	Russia	100%	675002, Amur region, Blagoveschensk, Pervomayskaya Street, 62/1
LLC NPGF Regis	Russia	100%	675027, Amur region, Blagoveschensk, Western Industrial Hub
CJSC ZRK Dalgeologiya	Russia	99.38%	680041, Khabarovskiy region, Khabarovsk, Balashovskaya Street, 15
JSC PHM Engineering	Russia	94%	105082, Moscow, Rubtsov Pereulok, 13
JSC Irgiredmet	Russia	99.69%	664025, Irkutsk, Gagarina Boulevard, 38
LLC NIC Gydro metallurgiya	Russia	100%	196247, St Petersburg, Leninskiy Prospekt, 151, level 6, office 635, 26
LLC BMRP	Russia	100%	675016, Amur region, Blagoveschensk, Kalinina Street, 137
LLC AVT-Amur	Russia	49%	675000, Amur region, Blagoveschensk, Lenina Street, 140/1
LLC Transit	Russia	100%	676572, Amur region, Selemdzhinskiy District, Fevralsk Urban Village, Vysotskogo Street, 1
Pokrovskiy Mining College	Russia	99.38%	676244, Amur region, Zeya, Zolotogorskoe Shosse, 6
Universal Mining Inc.	Guyana	100%	Lot 8 Pere Street, Kitty, Georgetown
Petropavlovsk (Cyprus) Limited	Cyprus	100%	14 Souliou Street, Aglantzia, Nicosia, 2102
Malomyrskiy Rudnik (Cyprus) Ltd	Cyprus	100%	14 Souliou Street, Aglantzia, Nicosia, 2102
Voltimand Limited	Cyprus	100%	14 Souliou Street, Aglantzia, Nicosia, 2102
Horatio Limited	Cyprus	100%	14 Souliou Street, Aglantzia, Nicosia, 2102
Sicinius Limited	Cyprus	100%	14 Souliou Street, Aglantzia, Nicosia, 2102
Syncrom High Corporation Ltd	Cyprus	100%	14 Souliou Street, Aglantzia, Nicosia, 2102
Cayiron Limited	Cayman Islands	100%	Clifton House, 75 Fort Street, PO Box 1350, Grand Cayman, KY1-1108
Associates			
IRC Limited ^(b)	HK	31.10%	6H, 9 Queen's Road Central, Central, Hong Kong
<i>Subsidiaries of IRC</i>			
LLC Petropavlovsk- Iron Ore	Russia	31.10%	127055, Moscow, Lesnaya Street, 43, Office 313
LLC Olekminskiy Rudnik	Russia	31.10%	676253, Amur region, Tyndinskiy District, Village Olekma

34. Related undertakings of the Group continued

Name of undertaking	Country of incorporation	Proportion of shares held by the Group ^(a)	Registered address
LLC KS GOK	Russia	31.10%	679000, The Jewish Autonomous Region, Birobidzhan, 60-Letiya SSSR Street, Building 22B
LLC Garinsky Mining & Metallurgical Complex	Russia	30.97%	675028, Amur region, Blagoveschensk, Ignatievskaya Road, 19
LLC Kostenginskiy GOK	Russia	31.10%	679000, The Jewish Autonomous Region, Birobidzhan, 60-Letiya SSSR Street, Building 22B.
LLC Orlovsko-Sokhatinskiy Rudnik	Russia	31.10%	675028, Amur region, Blagoveschensk, Ignatievskaya Road, 19
JSC Giproruda	Russia	21.85%	196247, St Petersburg, Leninskiy Prospect, 151
LLC SHMTP	Russia	31.10%	682818, RF, Khabarovsk Territory, Town Sovetskaya Gavan, Pervomayskaya Street, 48A
LLC Amursnab	Russia	31.07%	127055, Moscow, Lesnaya Street, 43, Office 313
LLC Uralmining	Russia	31.10%	105066, Moscow, Dobroslobodskaya, 7/1, build. 3, level 2, 1, room 2, office 33
LLC Gorniy Park	Russia	18.75%	101000, Moscow, Pokrovka Street, 1/13/6 Building 2, Office 35
LLC Garinskaya Infrastructure	Russia	31.10%	675028, Amur region, Blagoveschensk, Ignatievskaya Road, 19
LLC TOK	Russia	31.10%	676282, Amur region, Tynda, Sovetskaya Street, 1A
Lucilius Investments Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Kapucius Services Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Lapwing Limited	Cyprus	30.97%	Themistokli Dervi 12, Palais D' Ivoire, 2nd Floor, 1066 Nicosia
Russian Titan Company Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Brasenose Services Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Tenaviva Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Esimanor Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Metellus Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Dardanius Limited	Cyprus	31.09%	Souliou 14, Aglantzia, 2102 Nicosia
Rumier Holdings Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Guiner Enterprises Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Expokom Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Arfin Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Caedmon Limited	Cyprus	18.75%	Souliou 14, Aglantzia, 2102 Nicosia
Thorholdco (Cyprus) Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Heilongjiang Jiatal Titanium Co., Limited	China	31.10%	668, Songxing Street, Jiamusi, Heilongjiang Province
Ariti HK Limited	Hong Kong	31.10%	6H, 9 Queen's Road Central, Central, Hong Kong
Ariva HK Limited	Hong Kong	31.10%	6H, 9 Queen's Road Central, Central, Hong Kong
Thorrouble Limited	Cayman Islands	31.10%	P.O. Box 31119 Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1-1205
Thordollar Limited	Cayman Islands	31.10%	P.O. Box 31119 Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1-1205
Thorholdco Limited	Cayman Islands	31.10%	P.O. Box 31119 Grand Pavilion, Hibiscus Way, 802 West Bay Road, Grand Cayman, KY1-1205
Aricom UK Limited	UK	31.10%	11 Grosvenor Place, London, SW1X 7HH
Aricom Limited	UK	31.10%	11 Grosvenor Place, London, SW1X 7HH
<i>Joint ventures of IRC</i>			
Heilongjiang Jianlong Vanadium Industries Co., Limited	China	14.31%	Building 50, Block12, Advanced Business Park, No. 188. West Road, South Ring 4, Fengtai District, Beijing

(a) In the ordinary class of shares.

(b) IRC Limited and its principal subsidiary and joint venture undertakings.

Company Balance Sheet

As at 31 December 2019

	Note	31 December 2019 US\$'000	31 December 2018 ^(a) (restated) US\$'000
Fixed assets			
Tangible assets		14	20
Right-of-use assets	9	992	-
Investments	3	603,019	490,164
		604,025	490,184
Current assets			
Derivative financial asset		11,022	-
Debtors: due within one year	4	898,318	820,340
Cash at bank and in hand		2,881	8,365
		912,221	828,705
Creditors: amounts falling due within one year	5	(930,216)	(873,324)
Net current liabilities		(17,995)	(44,619)
Total assets less current liabilities		586,030	445,565
Derivative financial liability	8	(46,313)	(3,547)
Creditors: amounts falling due after more than one year	5	(631,195)	(602,237)
Financial guarantee contract	7	(8,923)	(37,387)
Net liabilities		(100,401)	(197,606)
Capital and reserves			
Share capital		49,003	48,963
Share premium		518,142	518,142
Other reserves		200	228
Retained earnings		(667,746)	(764,939)
Shareholders' deficit		(100,401)	(197,606)

(a) See [note 2](#) for details regarding the restatement.

The profit after-tax for the year of the Company was US\$96.9 million (2018 restated: profit after-tax of US\$13.4 million).

The accompanying notes are an integral part of this balance sheet.

These financial statements for Petropavlovsk PLC, registered number 4343841, on pages [250](#) to [255](#) were approved by the Directors on 26 May 2020 and signed on their behalf by



Sir Roderic Lyne
Director



Dr Pavel Maslovskiy
Director

Company Statement of Changes in Equity

For the year ended 31 December 2019

	Share capital ^(a) US\$'000	Share premium ^(a) US\$'000	Other reserves US\$'000	Retained earnings US\$'000	Total US\$'000
Balance at 1 January 2018	48,920	518,142	(2,560)	(42,149)	522,353
Impact of adopting IFRS 9 (restated ^(b))	–	–	2,705	(736,438)	(733,733)
Profit for the year (restated ^(b))	–	–	–	13,358	13,358
Deferred share awards	43	–	83	290	416
Balance at 1 January 2019 (restated ^(b))	48,963	518,142	228	(764,939)	(197,606)
Profit for the year	–	–	–	96,925	96,925
Deferred share awards	40	–	(28)	268	280
Balance at 31 December 2019	49,003	518,142	200	(667,746)	(100,401)

(a) Please see [note 24](#) to the consolidated financial statements.

(b) See [note 2](#) for details regarding the restatement.

Notes to the Company Financial Statements

For the year ended 31 December 2019

1. Basis of preparation

Petropavlovsk PLC (the 'Company') is a public company limited by shares, incorporated and registered in England and Wales. The address of the registered office is 11 Grosvenor Place, London SW1X 7HH.

These financial statements were prepared in accordance with FRS 101 (Financial Reporting Standard 101) 'Reduced Disclosure Framework' as issued by the Financial Reporting Council.

As permitted by FRS 101, the Company has taken advantage of the disclosure exemptions available under that standard in relation to share-based payments, financial instruments, presentation of comparative information in respect of certain assets, presentation of a cash-flow statement, standards not yet effective, impairment of assets and related party transactions.

Where required, equivalent disclosures are given in the consolidated financial statements.

The financial statements have been prepared on the historical cost basis except for the re-measurement of certain financial instruments to fair value.

As permitted by section 408 of the Companies Act 2006, the profit and loss account of the parent company is not presented as part of these financial statements.

2. Significant accounting policies

2.1 Adoption of new and revised standards and interpretations

As disclosed in [note 2](#) to the Group's consolidated financial statements for the year ended 31 December 2019, IFRS 16 "Leases" was effective for annual periods beginning on or after 1 January 2019 and have been adopted by the Company accordingly.

The impact of adoption of IFRS 16 is detailed in [note 2.2](#) to the consolidated financial statements.

2.2 Foreign currencies

The functional and presentation currency of the Company is the US Dollar. Transactions denominated in other currencies, including the issue of shares, are translated at the rate of exchange ruling on the date of the transaction. Monetary assets and liabilities that are denominated in other currencies are retranslated at the rates prevailing on the balance sheet date. Exchange rates used are consistent with the rates used by the Group as disclosed in [note 2.6](#) to the consolidated financial statements. Exchange differences are charged or credited to the profit and loss account in the year in which they arise.

2.3 Tangible fixed assets and depreciation

Tangible fixed assets are stated at cost, net of accumulated depreciation. Depreciation is provided on all tangible fixed assets at rates calculated to write off the cost or valuation of each asset on a straight-line basis over its expected useful life as follows:

	Average life Number of years
Office equipment	4–7
Computer equipment	3

Useful lives and residual values are reviewed at the end of every reporting period.

2.4 Investments

Investments in subsidiary undertakings and joint ventures are initially measured at cost and subsequently carried at cost less provisions for impairment. Investments are reviewed for impairment when events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable. An impairment loss is recognised if the carrying amount of the investment exceeds the higher of net realisable value and the discounted future earnings from the investment.

Investments, other than investments in subsidiary undertakings and joint ventures, are measured at fair value. Changes to the fair value of other investments are recognised through profit or loss.

2.5 Taxation including deferred taxation

Full provision is made for deferred taxation on taxable temporary differences that have arisen but not reversed at the balance sheet date, except that deferred tax assets are only recognised to the extent that it is more likely than not that they will be recovered. Deferred tax is measured on a non-discounted basis at the tax rates that are expected to apply in the periods in which timing differences reverse, based on tax rates and laws enacted or substantially enacted at the balance sheet date.

2.6 Financial assets and liabilities

Financial assets are measured on initial recognition at fair value and are subsequently measured at amortised cost using the effective interest rate method, less any impairment.

Financial liabilities, other than derivatives, are measured on initial recognition at fair value and are subsequently measured at amortised cost, using the effective interest rate method.

From 1 January 2018, the Company assesses on a forward-looking basis the expected credit losses associated with its financial assets carried at amortised cost. The impairment methodology applied depends on whether there has been a significant increase in credit risk. The Company recognises an impairment loss in profit and loss account with a corresponding adjustment to carrying amount of financial assets.



2.7 Derivative financial instruments

Derivative financial instruments are initially accounted for and measured at fair value on the date a derivative contract is entered into and subsequently measured at fair value.

The gain or loss on re-measurement is taken to the income statement except where the derivative is a designated cash flow hedging instrument.

Derivative financial instruments embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of host contracts and the host contracts are not carried at fair value, are recognised at fair value at inception with gains or losses reported in the income statement.

2.8 Dividends

Dividends payable are recognised when they have been approved and, therefore, meet the criteria for a present obligation.

2.9 Leases

As explained in [note 2.1](#), the Company has changed its accounting policy for leases on adoption of IFRS 16.

The right-of-use asset is initially measured at the initial measurement of the corresponding lease liability and subsequently measured at cost less accumulated depreciation and impairment losses. The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date. Subsequently, the lease liability is adjusted for interest and lease payments, as well as the impact of lease modifications, amongst others.

2.10 Prior year restatement

Subsequent to the preparation of the Petropavlovsk PLC parent company only financial statements for the year ended 31 December 2018, the equivalent financial statements for the subsidiary undertakings were prepared, including the mandatory adoption and first time application of IFRS 9 'Financial Instruments' with effect from 1 January 2018.

After the recognition of IFRS 9 expected credit losses on adoption of this standard, the subsidiary's net assets were insufficient to support the investment carrying value held by Petropavlovsk PLC as at 31 December 2018 as part of the Investments balance sheet line (Investments in Group companies within [note 3](#)). For Petropavlovsk PLC's loan receivable from its subsidiary, as part of the Debtors due within one year balance sheet line (Debtors: Owed by Group companies within [note 4](#)), whilst intercompany letters of support exist in relation to Group entities, they cannot be considered to represent contractual obligations sufficient to remedy these shortfalls through intercompany asset transfers under IFRS 9.

Accordingly, the opening balance sheet of Petropavlovsk PLC as at 1 January 2018 and as at 31 December 2018 has been restated, as set out in the table below, to reflect write downs of its investments and intercompany loans respectively to be consistent with the net assets presented in the final subsidiary statutory accounts.

	31 December 2018 US\$'000	Increase/ (Decrease) US\$'000	31 December 2018 Restated US\$'000	1 January 2018 US\$'000	Increase/ (Decrease) US\$'000	1 January 2018 Restated US\$'000
Investments in Group Companies	789,822	(300,245)	489,577	775,314	(300,626)	474,688
Owed by Group companies	1,134,845	(324,080)	810,765	1,068,939	(379,271)	689,668
Retained earnings	(140,614)	(624,325)	(764,939)	(98,690)	(679,897)	(778,587)
(Loss)/Profit after tax for the year	(42,214)	55,572	13,358	–	–	–

This restatement of intercompany balances had no effect on the consolidated results or consolidated balance sheet of the Group as at 1 January 2018 or 31 December 2018. No distributions were made during the year ending 31 December 2018 or subsequently.

In the year ended 31 December 2019 the Group has presented separately on the face of the balance sheet, Financial guarantee contracts, whereas previously these were presented within Creditors. The comparative financial information has been reclassified to be on a consistent basis.

2.11 Areas of judgement in applying accounting policies and key sources of estimation uncertainty

When preparing these financial statements in accordance with the accounting policies as set out in [note 2](#), management necessarily makes judgements and estimates that can have a significant impact on the financial statements. These judgements and estimates are based on management's best knowledge of the relevant facts and circumstances and previous experience. Actual results may differ from these estimates under different assumptions and conditions ([note 3](#) to the consolidated financial statements).

The assessment of impairment of investments in Group companies and carrying values of balances owed by Group companies, as well as the valuation of the Company's guarantees over IRC borrowings and the convertible bonds (see notes [26](#) and [18](#) to the consolidated financial statements respectively), are considered key areas of estimation uncertainty.

Notes to the Company Financial Statements continued

For the year ended 31 December 2019

3. Investments

	Investments in Group companies ^(b) US\$'000	Other investments US\$'000	Total ^(b) US\$'000
Cost			
At 1 January 2019	2,135,271	587	2,135,858
Impact of intra-group transfers ^(a)	161,039	–	161,039
Fair value change	–	(302)	(302)
At 31 December 2019	2,296,310	285	2,296,595
Provision for impairment			
At 1 January 2019 (restated ^(b))	(1,645,694)	–	(1,645,694)
Charge for the year	(47,882) ^(a)	–	(47,882)
At 31 December 2019	(1,693,576)	–	(1,693,576)
Net book value			
At 1 January 2019 (restated ^(b))	489,577	587	490,164
At 31 December 2019	602,734	285	603,019

(a) To reflect a distribution of 100% equity interest in a subsidiary undertaking by another Group entity. This was recognised as income by the Company with a corresponding \$161.0 million increase in the carrying value of its investments. No impairment arose in respect of the entity making the distribution.

(b) See [note 2](#) for details regarding the restatement.

(c) Impairment charge to reflect changes in the value of the underlying investment in IRC Limited ([note 14](#) to the consolidated financial statements).

Details of the Company's subsidiary undertakings at 31 December 2019 are provided in [note 33](#) to the consolidated financial statements.

4. Debtors

	2019 US\$'000	2018 (restated) ^(b) US\$'000
Due within one year		
Owed by Group companies ^(a)	886,343	810,765
Other debtors	11,975	9,575
	898,318	820,340

(a) Net of provision for impairment of US\$374.7 million (2018: US\$365.4 million).

(b) See [note 2](#) for details regarding the restatement.

5. Creditors

	2019 US\$'000	2018 (restated) ^(a) US\$'000
Due to Group companies	1,546,376	1,469,066
Accruals and other creditors	15,035	6,495
	1,561,411	1,475,561
Due within one year	930,216	873,324
Due after more than one year	631,195	602,237
	1,561,411	1,475,561

(a) See [note 2](#) for details regarding the restatement.

6. Taxation

As at 31 December 2019, the Company has tax losses available to carry forward in the amount of US\$269.8 million and corporate interest restriction disallowances in the amount of US\$61.8 million (2018: US\$300.7 million and US\$61.8 million).

7. Parent company guarantees

The Company has provided a number of corporate guarantees including being a guarantor to the US\$500 million Guaranteed Notes due for repayment on 14 November 2022 and US\$125 million Convertible Bonds due on 03 July 2024. No material value is associated with these guarantees. The Company also guarantees the borrowings of its 31.1% associate, IRC with corresponding US\$8.9 million financial liability recognised at 31 December 2019 (2018: US\$37.4 million), with further details provided in note 26 to the consolidated financial statements.

8. Derivative financial liability

In respect of the US\$125 million Convertible Bonds due on 3 July 2024, the conversion option is measured at fair value and is presented separately within derivative financial liabilities with US\$46.3 million recognised at 31 December 2019 (2018: US\$2.4 million) as set out in note 20 to the consolidated financial statements.

9. Leases

At the balance sheet date, the Company has the following amounts recognised relating to leases that relate to the rent of office premises:

	2019 US\$'000
Right-of-use assets	990
Lease liabilities	
Amount due for settlement within 12 months	200
Amount due for settlement after 12 months	793
	993

10. Directors' remuneration

There was one Executive Director who held office at the end of the year (2018: two Executive Directors who held office at the end of the year). Details of Directors' remuneration are provided in the Directors' Remuneration Report on pages [156](#) to [174](#) of this Annual Report.

11. Subsequent events

On 13 April 2020 it was resolved that the principal subsidiary of the Company would distribute a Russian Rouble denominated dividend in the amount equivalent of US\$45.6 million.

The Use and Application of Alternative Performance Measures (APMs)

Throughout this Annual Report, when discussing the Group's financial performance, reference is made to APMs.

Each of the APMs is defined and calculated by the Group and as such they are non-IFRS measures because they may include or exclude certain items that an IFRS measure ordinarily would or would not take into account. APMs should not be regarded as an alternative or substitute for the equivalent measures calculated and presented in accordance with IFRS but instead should be seen as additional information provided to investors to enable the comparison of information between different reporting periods of the Group.

Although the APMs used by the Group may be calculated in a different manner and defined differently by other peers in the precious metals mining sector (despite being similar in title), they are nonetheless relevant and commonly used measures for the industry in which Petropavlovsk operates. These and similar measures are used widely by certain investors, analysts and other interested parties as supplemental measures of financial performance.

Some of the APMs form part of the Group's Key Performance Indicators (KPIs), which are used to monitor progress and performance against strategic objectives and to benchmark the performance of the business each year.

A discussion of the relevance of each APM as well as a description of how they are calculated is set out below, with reconciliation to IFRS equivalents from the consolidated IFRS financial statements (Consolidated Statement of Profit or Loss (SPL), Consolidated Statement of Financial Position (SFP), Consolidated Statement of Cash Flows (SCF) and the notes to the consolidated IFRS financial statements).

Total Cash Costs (TCC)

Definition

The total cash cost per ounce is the cost of producing and selling an ounce of gold from the Group's three hard-rock operations (2018: four) and processing and selling an ounce of gold by treatment of third-party sourced refractory concentrate at the POX Hub.

Calculation

TCC are calculated by the Group as operating cash costs less co-product revenue (2018: and less cost of flotation concentrate sold to third-party). TCC per oz are calculated as total cash costs divided by the ounces of gold sold. TCC per oz are presented on a segment basis.

Operating cash costs are defined by the Group as operating cash expenses plus refinery and transportation costs, other taxes and mining tax. This also equates to the Group's segment result as reported under IFRS plus each segment's share of results of associates, loss/gain on disposal of subsidiaries, impairment of ore stockpiles, gold in circuit and flotation concentrate, impairment of exploration and evaluation assets, impairment of mining assets, impairment of non-trading loans, central administration expenses, depreciation minus each segment's revenue from external customers, reversal of impairment of ore stockpiles and gold in circuit, reversal of impairment of mining assets and in-house service. Operating cash costs are presented on a segment basis.

Operating cash expenses are defined by the Group as the total of staff costs, materials, fuel, electricity, other external services, other operating expenses, and the movement in ore stockpiles, work in progress, bullion in process and flotation concentrate attributable to gold production. The main cost drivers affecting operating cash expenses are stripping ratios, production volumes of ore mined / processed, recovery rates, cost inflation and fluctuations in the rouble to US dollar exchange rate.

Other companies may calculate this measure differently.

Relevance

The Group closely monitors its current and projected costs to track and benchmark the ongoing efficiency and effectiveness of its operations. This monitoring includes analysing fluctuations in the components that operating cash costs and cost per tonne mined and processed to identify where and how efficiencies may be made.

Reconciliation

The tables below provide a reconciliation between operating expenses and total cash costs to calculate the cash cost per ounce sold for relevant periods.

2019	Ref	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Total US\$'000
Operating expenses	SPL						590,853
Deduct:							
Foreign exchange losses	note 6						(20,808)
Depreciation	note 6						(137,775)
Reversal of impairment of mining assets and in-house service	note 6						52,159
Reversal of impairment of ore stockpiles	note 6						2,778
Impairment of gold in circuit	note 6						(142)
Central administration expenses	note 6						(52,527)
Operating cash costs	note 4	170,349	–	135,427	80,017	48,745	434,538
Deduct:							
Corporate and other segment	note 4					(48,745)	(48,745)
Deduct: silver revenue	note 4	(464)	–	(267)	(146)	–	(877)
Total Cash Costs		169,885	–	135,160	79,871	–	384,916
Total ounces sold	oz	163,398	–	179,791	170,817		514,005
Total Cash Cost per ounce sold	US\$/oz	1,040	–	752	468		749

2018 (restated)	Ref	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Total US\$'000
Operating expenses	SPL						388,643
Deduct:							
Foreign exchange gains	note 6						8,450
Depreciation	note 6						(142,003)
Reversal of impairment of mining assets and in-house service	note 6						101,695
Impairment of exploration and evaluation assets	note 6						(12,192)
Impairment of ore stockpiles	note 6						(18,021)
Impairment of gold in circuit	note 6						(2,125)
Central administration expenses	note 6						(39,195)
Operating cash costs	note 4	107,549	8,667	53,279	84,471	31,286	285,252
Deduct:							
Corporate and other segment	note 4					(31,286)	(31,286)
Deduct: silver revenue	note 4	(591)	(29)	(61)	(160)	–	(841)
Deduct: cost of flotation concentrate	note 4	–	–	(2,558)	–	–	(2,558)
Total Cash Costs		106,958	8,638	50,660	84,311	–	250,567
Total ounces sold	oz	135,001	6,442	77,448	150,720		369,611
Total Cash Cost per ounce sold	US\$/oz	792	1,341	654	559		678

The Use and Application of Alternative Performance Measures (APMs) continued

All in Sustaining Costs (AISC)

Definition

AISC includes both operating and capital costs required to sustain gold production on an ongoing basis, over and above the direct mining and selling costs shown by TCC.

Calculation

AISC are calculated by the Group as TCC plus/(minus) impairment/(reversal of impairment) of ore stockpiles, gold in circuit and flotation concentrate, central administration expenses, plus sustaining capitalised stripping, close-down and site

restoration and sustaining capital and exploration expenditure. This is then divided by the ounces of gold sold. AISC are presented on a segment basis.

AISC are calculated in accordance with guidelines for reporting AISC as published by the World Gold Council in June 2013. Other companies may calculate this measure differently.

Relevance

AISC allows for a better understanding of the true cost of producing gold once key components such as central admin costs and

the cost of sustaining capital and exploration expenditure are taken into account. Management uses this measure to monitor the performance of our assets and their ability to generate positive cash flows.

Reconciliation

The tables below provide a reconciliation between total cash costs and all-in sustaining costs to calculate all-in sustaining cost per ounce sold for relevant periods.

2019	Ref	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Total US\$'000
Total cash costs		169,885	–	135,160	79,871	–	384,916
Add:							
Impairment/ (reversal of impairment) of ore stockpiles	note 6	664	–	517	(3,959)	–	(2,778)
Impairment/ (reversal of impairment) of gold in circuit	note 6	(101)	–	243	–	–	142
Central administration expenses	note 6	16,698	–	18,373	17,456	–	52,527
Capitalised stripping	note 13	14,454	–	12,653	–	–	27,107
Site restoration costs		210	–	229	614	–	1,053
Sustaining exploration expenditures		3,983	–	77	29	–	4,089
Sustaining Capital Expenditures		16,883	–	16,467	23,893	–	57,243
All-in Sustaining Costs		222,676	–	183,719	117,904	–	524,299
Total ounces sold	oz	163,398	–	179,791	170,817	–	514,005
All-in Sustaining Costs per ounce sold	US\$/oz	1,363	–	1,022	690	–	1,020

2018 (restated)	Ref	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Total US\$'000
Total cash costs		106,958	8,638	50,660	84,311	–	250,567
Add:							
Impairment of ore stockpiles	note 6	–	–	309	17,712	–	18,021
Impairment of gold in circuit	note 6	1,415	17	536	157	–	2,125
Central administration expenses	note 6	14,316	683	8,214	15,982	–	39,195
Capitalised stripping	note 13	8,896	–	11,529	12,572	–	32,997
Site restoration costs		172	–	559	511	–	1,242
Sustaining exploration expenditures		8,902	–	5,502	4,079	–	18,483
Sustaining Capital Expenditures		20,003	–	4,612	11,471	–	36,086
All-in Sustaining Costs		160,662	9,338	81,921	146,795	–	398,716
Total ounces sold	oz	135,001	6,442	77,448	150,720	–	369,611
All-in Sustaining Costs per ounce sold	US\$/oz	1,190	1,449	1,058	974	–	1,079

All in Costs (AIC)

Definition

AIC comprises of AISC as well as capital expenditures for major growth projects or enhancement capital for significant improvements at existing operations.

Calculation

AIC are calculated by the Group as AISC plus non-sustaining capitalised stripping (when the resulting ore production phase is more than

five years), non-sustaining exploration and capital expenditure and (reversal of impairment)/impairment of refractory ore stockpiles. This is then divided by the ounces of gold sold. AIC are presented on a segment basis.

AIC is calculated in accordance with guidelines for reporting AIC as published by the World Gold Council in June 2013. Other companies may calculate this measure differently.

Relevance

AIC reflect the costs of producing gold over the life cycle of a mine.

Reconciliation

The tables below provide a reconciliation between all-in sustaining costs and all-in costs to calculate all-in cost per ounce sold for relevant periods.

2019	Ref	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Total US\$'000
All-in Sustaining Costs		222,676	–	183,719	117,904	–	524,299
Add:							
Exploration expenditure		691	–	1,095	8,350	–	10,136
Capital Expenditure		22,169	–	10,190	–	–	32,359
All-in costs		245,536	–	195,004	126,254	–	566,794
Total ounces sold	oz	163,398	–	179,791	170,817	–	514,005
All-in costs per ounce sold	US\$/oz	1,503	–	1,085	739	–	1,103

2018 (restated)	Ref	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Total US\$'000
All-in Sustaining Costs		160,662	9,338	81,921	146,795	–	398,716
Add:							
Exploration expenditure		1,092	–	1,084	971	–	3,147
Capital Expenditure		22,740	–	53,910	–	–	76,650
Capitalised stripping	note 13	13,991	–	–	–	–	13,991
All-in costs		198,485	9,338	136,915	147,766	–	492,504
Total ounces sold	oz	135,001	6,442	77,448	150,720	–	369,611
All-in costs per ounce sold	US\$/oz	1,470	1,449	1,768	980	–	1,332

The Use and Application of Alternative Performance Measures (APMs) continued

Average Realised Gold Sales Price

Definition

The average realised gold sales price is the mean price at which the Group sold its gold production output throughout the reporting period, including the realised effect of cash flow hedge contracts during the period.

Calculation

The average realised gold sales price is calculated by dividing total revenue received from gold sales (including the realised effect of any hedging contracts) by the total quantity of gold sold during the period. Other companies may calculate this measure differently.

Relevance

As gold is the key commodity produced and sold by the Group, the average realised gold sales price is a key driver behind the Group's revenues and profitability.

Reconciliation

The average realised gold price has been calculated as set out in the table below.

	Ref		2019	2018
Gold revenue	note 4	US\$'000	691,697	466,674
Gold sold		ounces	514,005	369,611
Average realised gold price		US\$/oz	1,346	1,263

Capital Expenditure (CAPEX)

Definition

CAPEX is the investment required by the Group to explore and develop its gold assets and keep current plants and other equipment at its gold mines in good working order.

Calculation

CAPEX represents cash flows used in investing activities, namely Purchases of property, plant and equipment and Expenditure of exploration and evaluation assets.

the business. CAPEX requirements need to be balanced in line with the Group's strategy and provide an optimal allocation of the Group's funds.

Reconciliation

The table below provides a reconciliation between capital expenditure and cash flows used in investing activities.

	Ref		31 December 2019 US\$'000	31 December 2018 (restated) US\$'000
Purchase of property, plant and equipment	SCF		120,798	178,201
Expenditure on exploration and evaluation assets	SCF		10,136	3,153
Less:				
Capitalised stripping	note 13		(27,107)	(46,988)
Total Capital Expenditure			103,827	134,366

Net debt

Definition

Net debt shows how indebted a company is after total debt and any cash (or its equivalent) are netted off against each other.

Calculation

Net debt is calculated as the sum of current borrowings and non-current borrowings less cash and cash equivalents. Other companies may calculate this measure differently.

ability to repay debt as well showing what progress is being made in strengthening the statement of financial position. The measure is also widely used by various stakeholders.

Reconciliation

The table below provides calculation of Net debt at relevant reporting dates.

	Ref		31 December 2019 US\$'000	31 December 2018 US\$'000
Cash and cash equivalents	SFP		48,153	26,152
Borrowings	SFP		(609,463)	(594,177)
Net debt			(561,310)	(568,025)

Underlying EBITDA

Definition

EBITDA is a common measure used to assess profitability without the impact of different financing methods, tax, asset depreciation and amortisation of intangibles and items of an exceptional / non-recurring nature, or those that could make comparison of results from prior periods less meaningful.

Calculation

Underlying EBITDA is calculated as profit/ (loss) for the period before financial income, financial expenses, foreign exchange gains and losses, fair value changes, taxation, depreciation, impairment charges/reversal of impairment. Other companies may calculate this measure differently.

Relevance

Underlying EBITDA is an indicator of the Group's ability to generate operating cash flows, which are the source of funding for the

Group's working capital requirements, capital expenditure and debt service obligations. The measure is also widely used by various stakeholders.

Reconciliation

The tables below provide reconciliations between net profit and Underlying EBITDA as well as reconciliation between operating profit and Underlying EBITDA for relevant periods.

	Ref	2019 US\$'000	2018 (restated) US\$'000
Profit for the period	SPL	25,693	25,929
Add/(less):			
Net (impairment reversals)/impairment losses on financial instruments	SPL	(30,797)	28,634
Investment and other finance income	SPL	(8,826)	(3,775)
Interest expense	SPL	59,854	29,520
Net other finance losses/(gains)	SPL	42,190	(10,185)
Foreign exchange losses/(gains)	note 6	20,808	(8,450)
Taxation	SPL	27,246	56,489
Depreciation	note 6	137,775	142,003
Impairment of exploration and evaluation assets	note 6	–	12,192
(Reversal of impairment)/impairment of ore stockpiles	note 6	(2,778)	18,021
Impairment of gold in circuit	note 6	142	2,125
Reversal of impairment of mining assets and in-house service	note 6	(52,159)	(101,695)
Share of results of associates ^(a)	note 14	45,699	(8,065)
Underlying EBITDA		264,847	182,743

(a) Group's share of interest expense, investment income, other finance gains and losses, foreign exchange gains and losses, taxation, depreciation and impairment/reversal of impairment recognised by an associate and impairment recognised against investment in the associate.

The Use and Application of Alternative Performance Measures (APMs) continued

2019	Ref	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Consolidated US\$'000
Operating profit	SPL						115,360
Foreign exchange losses	note 6						20,808
Segment result	note 4	54,275	–	56,896	105,083	(80,086)	136,168
Add/ (less):							
Depreciation	notes 4,6	41,225	–	46,549	48,144	1,857	137,775
Reversal of impairment of mining assets and in-house service	notes 4,6	(42,755)	–	–	–	(9,404)	(52,159)
Impairment/ (reversal of impairment) of ore stockpiles	notes 4,6	664	–	517	(3,959)	–	(2,778)
Impairment/ (reversal of impairment) of gold in circuit	notes 4,6	(101)	–	243	–	–	142
Share of results of associates ^(a)	note 14					45,699	45,699
Underlying EBITDA		53,308	–	104,205	149,268	(41,934)	264,847

2018 (restated)	Ref	Pioneer US\$'000	Pokrovskiy US\$'000	Malomir US\$'000	Albyn US\$'000	Corporate and other US\$'000	Consolidated US\$'000
Operating profit	SPL						126,612
Foreign exchange gains	note 6						(8,450)
Segment result	note 4	24,751	(1,163)	84,913	17,312	(7,651)	118,162
Add/ (less):							
Depreciation	notes 4,6	37,899	681	33,335	69,643	445	142,003
Reversal of impairment of mining assets and in-house service	notes 4,6	–	–	(82,958)	–	(18,737)	(101,695)
Impairment of exploration and evaluation assets	notes 4,6	–	–	12,192	–	–	12,192
Impairment of ore stockpiles	notes 4,6	–	–	309	17,712	–	18,021
Impairment of gold in circuit	notes 4,6	1,415	17	536	157	–	2,125
Share of results of associates ^(a)	note 14					(8,065)	(8,065)
Underlying EBITDA		64,065	(465)	48,327	104,824	(34,008)	182,743

(a) Group's share of interest expense, investment income, other finance gains and losses, foreign exchange gains and losses, taxation, depreciation and impairment/reversal of impairment recognised by an associate and impairment recognised against investment in the associate.

Appendix, Glossary and Definitions

For the year ended 31 December 2019

Important information

Past performance of Petropavlovsk PLC or any other company referred to in this document cannot be relied on as a guide to its future performance. Some figures may be rounded. The content of websites referred to in this document does not form part of this document.

Forward-looking statements

This document may include statements that are, or may be deemed to be, forward-looking statements. Generally, these forward-looking statements can be identified by the use of forward-looking terminology, including the terms 'believes', 'estimates', 'plans', 'targets', 'seeks', 'projects', 'anticipates', 'expects', 'intends', 'forecast', 'may', 'will', 'would' or 'should' or, in each case, their negative or other variations or comparable terminology, or by discussions of strategy, plans, objectives, goals, targets, future events or intentions. These forward-looking statements include all matters that are not historical facts and speak only as at the date of this document. They appear in a number of places throughout this document and include, but are not limited to, statements regarding the Group's intentions, beliefs or current expectations concerning, among other things, the Group's results of operations, financial position, liquidity, prospects, growth, strategies and expectations of the industry.

By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances. Forward-looking statements are not guarantees of future performance and the development of the markets and the industry in which the Group operates may differ materially from those described in, or suggested by, any forward-looking statements contained in this document. In addition, even if the development of the markets and the industry in which the Group operates are consistent with the forward-looking statements contained in this document, those developments may not be indicative of developments in subsequent periods. A number of factors could cause developments to differ materially from those expressed or implied by the forward-looking statements including, without limitation, general economic and business conditions, industry trends, competition, commodity prices, changes in law or regulation, currency fluctuations (including the US Dollar and Russian Rouble), the Group's ability to recover its reserves or develop new reserves, changes in its business strategy, political and economic uncertainty. Save as required by the Listing and Disclosure and Transparency Rules, the Company is under no obligation to update the information contained in this document.

Nothing in this publication should be considered to be a profit forecast and no statement in this document should be interpreted to mean that earnings per share for the current or future financial years would necessarily match or exceed the historical published earnings per share. This document does not constitute or form part of an invitation to sell or issue, or any solicitation of any offer or invitation to purchase or subscribe for, any securities.

Ore Reserve and Mineral Resource reporting – basis of preparation

In line with the approach adopted in previous years, the Group has reported its hard-rock Mineral Resources and Ore Reserves in accordance with the JORC Code. The assets are subdivided into 'core' and 'other' projects. Core projects are classified as the Group's three operational mines (Pioneer, Malomir, Albyn) plus any satellites that are scheduled for production using existing processing facilities, as well as the former Pokrovskiy mine. Mineral Resource and, where appropriate, Ore Reserve estimates for these assets were independently audited by Wardell Armstrong International ("WAI") in accordance with JORC Code (2012) in April 2017. The Ore Reserve estimates are based on a long-term gold price assumption of US\$1,400/oz with other modifying factors derived from the actual 2019 operational performance and appropriate technical studies. Mineral resources are estimated using a US\$1,700/oz long-term gold price assumption. The Group considers its 'other' projects to be those assets which have good prospects, but are not located near current processing facilities. Currently, 'other' projects include Tokur, Marrinskiy and exploration assets in Khabarovsk region. Of these, only Tokur has Mineral Resource and Ore Reserve estimates which were reviewed in accordance with JORC Code (2004) and signed off by WAI in March 2011. The estimates apply a US\$1,000/oz gold price assumption together with other modifying factors relevant at the time of the estimate. Tokur Mineral Resources and Ore Reserves have not changed since.

Appendix, Glossary and Definitions continued

For the year ended 31 December 2019

Alluvial	Material transported by a river and deposited at points along the flood plain and riverbed. The material may contain economical deposits of gold and other valuable minerals.
Assay	Chemical laboratory analysis of an ore sample to determine the proportion of gold, silver or other metal contained within.
Au	Chemical symbol for the element gold.
Autoclave	Equipment used as part of the pressure oxidation (POX) process to facilitate gold extraction from refractory concentrate by using a combination of high temperature, pressure and pure oxygen to break down the sulphides encapsulating the gold.
Backfill	Waste material used to fill the void created by mining an ore body.
Bondholder	Holder of the Group's US\$125 million 8.25% guaranteed convertible bonds maturing July 2024.
Brownfield exploration	Exploration work carried out close to, at or adjacent to existing mines. Also known as near-mine exploration.
Concentrate	A semi-finished product (from which waste mineral has been removed), containing a significantly higher quantity of gold per unit of weight than was originally mined and which requires additional processing at the POX Hub before it can be processed in the usual way, using the Company's RIP facilities.
Concentrate yield	The percentage of the mass of the original ore which is pulled into the concentrate.
Crushing	Breaking down ore from the size as first delivered from the mine into smaller, more uniform fragments, to be then fed into grinding mills or heaped onto a leach pad.
Cut-off grade	The lowest grade of mineralised material considered economically feasible for mining and processing. Used in the reporting of Ore Reserves and Mineral Resources.
Cyanidation	Treatment of finely crushed or ground ore with cyanide solution to dissolve and extract gold from it.
Depletion	Decrease in the quantity of ore at a deposit due to mining / extraction.
Deposit	Natural occurrence of a mineral or ore, in sufficient quantity and concentration to enable exploitation.
Dilution	The effect of mixing waste material with mined ore prior to delivery to the processing plant.
Doré	Unrefined / impure alloy of gold and silver produced at the mine before being sent to a refinery for additional purification.
Exploration	Prospecting, sampling, mapping, drilling and other work involved in searching for ore.
Feasibility study	Extensive technical and financial study to assess the commercial viability of a mining project.
Flotation	The process of separation, extraction and concentration of ore that results in the production of a high-grade refractory concentrate to be processed inside the autoclaves at the POX Hub. As part of the flotation process, certain mineral particles are induced to float by becoming attached to bubbles of froth while the unwanted mineral particles sink.
The Foundation or the Petropavlovsk Foundation	The Petropavlovsk Foundation for Social Investment.
Geochemical prospecting	Techniques which measure the content of specified metals in soil and rock. Sampling defines anomalies for.
further testing	Geophysical prospecting Techniques that measure the physical properties (magnetism, conductivity, density etc.) of rock and define anomalies.
g/t	Grams per metric tonne.
Grade	Amount of gold contained in a tonne of gold bearing ore, expressed in grams per metric tonne.
Greenfield exploration	Exploration carried out at a location where minimal to no previous exploration work has taken place.
Group	The Company and its subsidiaries.
Head grade	Gold content per tonne of ore fed into a mill for processing (in grams per metric tonnes).
Heap-leach	A process used for the recovery of gold from low grade ore. Crushed ore is piled high on a mildly sloping, impervious foundation and uniformly leached by the percolation of a cyanide solution through the ore, dissolving the contained gold. Thereafter, the metal is recovered from the solution using conventional methods.
HSE Committee	Health, Safety and Environmental Committee.

Hydrotechnical storage facility	An open-air storage facility used to store by-products and residue produced during the process of extracting gold from the ore.
ICBC	Industrial and Commercial Bank of China.
Indicated Resource	As defined in the JORC Code, the part of a mineral resource that has been sampled by drill holes, underground openings or other sampling procedures at locations that are too widely spaced to ensure continuity, but close enough to give a reasonable indication of continuity and where geoscientific data is known with a reasonable degree of reliability. An Indicated Mineral Resource will be based on more data and therefore will be more reliable than an Inferred Resource estimate.
Inferred Resource	As defined in the JORC Code, the part of a mineral resource for which the tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from the geological evidence and has assumed but not verified geological and / or grade continuity. It is based on information gathered through the appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, which may be limited or of uncertain quality and reliability.
IRC	IRC Limited, the Hong Kong listed former subsidiary, now associate, of the Group. Petropavlovsk remains a major shareholder with a holding of 31.1%.
JORC	Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia.
K&S	The Kimkan and Sutara deposits, which are being developed as one project by IRC.
koz	Thousand ounces.
KPI	Key Performance Indicator, used to monitor progress and performance against strategic objectives and to benchmark the Group's performance.
ktpa	Thousand tonnes per annum.
Life of mine	Remaining years of production at a particular location or asset, based on production rates and ore reserves, as per the Company's current mine plan.
Lost Time Injury Frequency Rate (LTIFR)	Time lost as a result of an accident or fatality, measured as the number of accidents per million man-hours worked.
m ³ /oz	Cubic meter per ounce of gold produced.
Mill	Equipment used to grind crushed rocks to the desired size for mineral extraction.
Mineralisation	The process of formation and concentration of elements and their chemical compounds within a mass or body of rock.
Mineral Resource	The concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such a form that there are reasonable prospects for eventual economic extraction. The location, quantity, grade geological characteristics and continuity of a mineral resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are subdivided into Inferred, Indicated and Measured categories.
Mining	The process of obtaining useful minerals from the earth's crust via both underground and surface / open pit mining activities.
Mtpa	Million tonnes per annum.
Noteholder	Holder of the Group's US\$500 million 8.125% guaranteed notes maturing November 2022.
OHS or OH&S	Occupational health and safety.
Open pit	Large excavation developed to extract a mineral deposit located at or near the surface.
Ore	Mineral rock that can be extracted and marketed profitably.
Ore processed	Ore subjected to treatment at one of the Group's RIP processing plants.
Ore body	Solid mass of mineralised rock that can be mined profitably under current or immediately foreseeable economic conditions.

Appendix, Glossary and Definitions continued

For the year ended 31 December 2019

Ore Reserve	The economically mineable part of a Measured or Indicated Mineral Resource. It includes diluting materials and allowances for losses that may occur when the material is mined. Appropriate assessments, which may include feasibility studies, have been carried out, and include consideration of, and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could be reasonably justified. Ore Reserves are sub divided in order of increasing confidence into Proved and Probable.
Ounce or oz	Troy ounce (31.1035 grams).
Overburden	Material (usually soil and rock) that sits above the ore deposit and must be removed to expose the ore.
Placer deposit	See entry for 'alluvial'.
Pressure oxidation (POX)	A high temperature and pressure process in which refractory ores (gold bearing sulphides) are oxidised to render gold amenable to cyanide leaching.
Probable Ore Reserve	Measured and / or Indicated Mineral Resources which are not yet proved, but where technical economic studies show that extraction is justifiable at the time of the determination and under specific economic conditions.
Proved Ore Reserve	Measured Mineral Resources, where technical economic studies show that extraction is justifiable at the time of the determination and under specific economic conditions recovery of the proportion of valuable material obtained in the processing of an ore, stated as a percentage of the material recovered compared with the total material processed.
Recovery rate	Quantity of metal physically extracted from the processing of ore, as a percentage of the total metal content, after accounting for mining losses.
Refractory ore	Ore that is ordinarily difficult to treat for recovery of the valuable element using traditional processing techniques. Refractory gold ore requires additional treatment such as pressure oxidation (POX), roasting or bio-oxidation for efficient processing and gold recovery.
R&D	Research and development.
Resin-in-pulp (RIP)	Processing technique by which a resin medium is used to absorb the desired element from solution or pulp.
Russian GKZ Standard Classification System	The means by which Russian reserves are assigned to classes based on the degree of reliability of data and indicates their comparative importance for the national economy.
Stockpile	Accumulation of unprocessed ore or mineralised material intended to serve as a reserve for current or future processing or as an additional source of material to achieve a uniform feed for the plant by blending with ore received from the mine.
Stope	An area in an underground mine where ore is mined.
Strike	Direction of the line formed by the intersection of a fault, bed or other planar feature and a horizontal plane.
Strike length	Longest horizontal dimension of an ore body or zone of mineralisation.
Stripping	Removal of waste rock to uncover an ore body in preparation for mining by open pit methods.
Strip ratio	The ratio of the volume of overburden (or waste material) removed relative to the volume of ore mined. For example, a 3:1 stripping ratio means that mining one cubic metre of ore will require mining three cubic metres of waste rock.
t/1koz	Tonnes per thousand of ounces of gold produced.
TJ/1koz	Terajoule per thousand of ounces of gold produced.
t/oz	Tonnes per ounce of gold produced.
Trench sampling	Taking samples from a trench on the surface or along a trench excavated underground, generally in the form of a series of continuous channels (channel samples).
Total gold production	Measured in troy ounces, total gold production is made up of gold produced from the Group's hard-rock mines as well as from the processing of material purchased from third parties.
tpm	Tonnes per month.

Communication with Our Shareholders

Shareholder enquiries

Enquiries relating to shareholders, such as queries concerning notification of change of address and lost share certificates, should be made to the Company's Registrars, Link Asset Services ('Link'). Link can be contacted directly by using one of the methods listed below.

By post:

Link Asset Services
The Registry
34 Beckenham Road
Beckenham
Kent BR3 4TU

Telephone Helpline:

0371 664 0300

Calls are charged at the standard geographic rate and will vary by provider. Calls outside the United Kingdom will be charged at the applicable international rate. We are open between 09:00 - 17:30, Monday to Friday excluding public holidays in England and Wales.

Online: enquiries@linkgroup.co.uk
(from here you will be able to e-mail Link with your enquiry).

Managing your shares online

Shareholders can manage their holdings online by registering with Link Asset Services share portal service. This is an online service provided by Link which enables shareholders to view and manage all aspects of their shareholding securely. The service is free and available 24 hours a day. Shareholders, whose shares are registered in their own name, can:

- View holdings plus indicated price and valuation;
- View movements on their shareholdings;
- Change their address;
- Register or change their e-mail address;
- Sign up to receive communications by e-mail instead of post; and
- Access the online voting service.

Website

Financial information about the Company, including annual reports, public announcements and share price data, is available from the Company's website at: www.petropavlovsk.net.

Additional documents:

Shareholders are encouraged to sign up to receive news alerts by e-mail. This includes financial news releases throughout the year.

tors are responsible for the maintenance and integrity of the financial information on the Company's website. This information has been prepared under the relevant accounting standards and legislation.

Company contact details

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Patrick Pittaway
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Company Secretarial

Amanda Whalley ACIS
Company Secretary

Annual General Meeting 2020

This year's Annual General Meeting (AGM) will be held on 30 June 2020 commencing at 11 a.m. Shareholders who wish to attend the AGM are kindly asked to read the accompanying notes to the Notice of the Meeting which explain the documentation required by shareholders in order for them to gain entry to the meeting.

GRI Content Index

GRI standard	Disclosure number	Disclosure	Page reference and notes
GRI 101: Foundation			
GRI General Disclosures			
Organisation profile			
GRI 102: General Disclosures	GRI 102 – 1	Name of organisation	Cover
	GRI 102 – 2	Activities, brands, products and services	IFC, 18, 19
	GRI 102 – 3	Location of headquarters	London
	GRI 102 – 4	Location of operations	44, 46, 48, 50
	GRI 102 – 5	Ownership and legal form	178, 203
	GRI 102 – 6	Markets served	18, 19, 96
	GRI 102 – 7	Scale of the organisation	IFC, 12, 58-67, 70, 87
	GRI 102 – 8	Information on employees and other workers	87, 100 The share of workers who are not employees is insignificant in the context of the total Group employees' number. Contractors are required for the underground operations and security services.
	GRI 102 – 9	Supply chain	96, 108
	GRI 102 – 10	Significant changes to the organisation and its supply chain	The POX Hub was commissioned at the end of 2018. See further details on the operation on page 50 .
	GRI 102 – 11	Precautionary Principle or approach	113
	GRI 102 – 12	External initiatives	91
	GRI 102 – 13	Membership associations	Union of Gold Producers of Russia
Strategy			
GRI 102: General Disclosures	GRI 102-14	Statement from senior decision maker	12, 13, 89
Ethics			
GRI 102: General Disclosures	GRI 102 – 16	Values, principles, standards and norms of behaviour	2, 3, 91
Corporate Governance			
GRI 102: General Disclosures	GRI 102 – 18	Governance structure	90, 135
Stakeholder engagement			
GRI 102: General Disclosures	GRI 102 – 40	List of stakeholder groups	92
	GRI 102 – 41	Collective bargaining agreements	103
	GRI 102 – 42	Identifying and selecting stakeholders	92
	GRI 102 – 43	Approach to stakeholder engagement	92-94
	GRI 102 – 44	Key topics and concerns raised	92-94
Identified material topics			
GRI 102: General Disclosures	GRI 102 – 45	Entities included in the consolidated financial statements	246
	GRI 102 – 46	Defining report content and topic boundaries	94-95
	GRI 102 – 47	List of material topics	94

GRI standard	Disclosure number	Disclosure	Page reference and notes
	GRI 102 – 48	Restatement of information	Total energy consumption for 2018 and 2017 has been restated due to the conversion error in data presented in 2018 report. Total waste generated data for 2018 and 2017 has been restated to reflect a wider scope of the reporting in 2019.
	GRI 102 – 49	Changes in reporting	94 The new methodology was applied to GHG emissions reporting in 2019 to reflect a wider scope of emissions sources. We were unable to restate the data for 2018 and 2017.
Report Profile			
GRI 102: General Disclosures	GRI 102 – 50	Reporting period	1 January – 31 December 2019
	GRI 102 – 51	Date of most recent report	2018 Annual Report, published 29 April 2019
	GRI 102 – 52	Reporting cycle	Annual
	GRI 102 – 53	Contact point for questions regarding the report	91 Alexander Rozhetskin ar@petropavlovsk.net Olga Mayorova om@petropavlovsk.net +44 (0) 20 7201 8900
	GRI 102 – 54	Claims of reporting in accordance with GRI standards	This report has been prepared in accordance with the GRI Standards: Core option
	GRI 102 – 55	GRI content index	268-273
	GRI 102 – 56	External assurance	124-125
GRI Material Topics			
<i>Economic performance</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	94 , 105 , 109
	GRI 103 – 2	The management approach and its components	105
	GRI 103 – 3	Evaluation of the management approach	105 , 109
GRI 201: Economic Performance	GRI 201 – 1	Direct economic value generated and distributed	109
<i>Procurement practices</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	92 , 94 , 96
	GRI 103 – 2	The management approach and its components	96 , 108
	GRI 103 – 3	Evaluation of the management approach	93 , 96
GRI 204: Procurement Practices	GRI 204 – 1	Proportion of spending on local suppliers	96
<i>Anti-corruption</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	94 , 100
	GRI 103 – 2	The management approach and its components	100

GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page reference and notes
	GRI 103 – 3	Evaluation of the management approach	93, 100
GRI 205: Ant-corruption	GRI 205 – 3	Confirmed incidents of corruption and actions taken	100
<i>Energy</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	88, 94, 113, 115
	GRI 103 – 2	The management approach and its components	113, 115
	GRI 103 – 3	Evaluation of the management approach	113, 115
GRI 302: Energy	GRI 302 – 1	Energy consumption within the organisation	115 Disclosure without further breakdown by renewable and non-renewable energy sources.
	GRI 302 – 3	Energy intensity	115
<i>Water</i>			
GRI 303: Water	GRI 303 – 1	Interactions with water as a shared resource	113-114
	GRI 303 – 2	Management of water discharge-related impacts	97, 113-114
	GRI 303 – 3	Water withdrawal	114
	GRI 303 – 4	Water discharge	114
	GRI 303 – 5	Water consumption	114 Water consumption is assessed by instrumental control.
<i>Biodiversity</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	94, 113, 118-120
	GRI 103 – 2	The management approach and its components	97, 113, 118-119
	GRI 103 – 3	Evaluation of the management approach	113, 118-120
GRI 304: Biodiversity	GRI 304 – 1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	118 , Zero
	GRI 304 – 4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	17 species in national conservation list, including 8 species in IUCN Red List: – Least Concern (LC) – 6 species – Near Threatened (NT) – 2 species
<i>Emissions</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	88, 94, 113, 115-116
	GRI 103 – 2	The management approach and its components	88, 113, 115-116
	GRI 103 – 3	Evaluation of the management approach	88, 113, 115-116

GRI standard	Disclosure number	Disclosure	Page reference and notes
GRI 305: Emissions	GRI 305 – 1	Direct (Scope 1) GHG emissions	88 Biogenic CO ₂ emissions are not generated at the Group's operation. Emission factors provided by IPCC 2006 Guidelines for National Greenhouse Gas Inventories and global warming potential (GWP) values presented in the IPCC Fourth Assessment Report (AR4) were used.
	GRI 305 – 2	Energy indirect (Scope 2) GHG emissions	88 Base year has not been set for the GHG emissions calculation.
	GRI 305 – 4	GHG emissions intensity	88 Gases included in the calculation: CO ₂ , CH ₄ , N ₂ O.
	GRI 305 – 7	Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions	116
<i>Effluents and waste</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	94, 104, 118-119
	GRI 103 – 2	The management approach and its components	113, 118-119
	GRI 103 – 3	Evaluation of the management approach	113, 118-119
GRI 306: Effluents and Waste	GRI 306 – 2	Waste by type and disposal method	118 It has not been possible to show a breakdown of hazardous and non-hazardous for each disposal method for this reporting period.
	GRI 306 – 3	Significant spills	Zero
<i>Environmental compliance</i>			
GRI 103: Management approach	GRI 103 – 1	Explanation of the material topic and its boundary	94, 113
	GRI 103 – 2	The management approach and its components	113
	GRI 103 – 3	Evaluation of the management approach	93, 113
GRI 307: Environmental Compliance	GRI 307 – 1	Non-compliance with environmental laws and regulations	114
<i>Employment</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	92, 94, 99-103
	GRI 103 – 2	The management approach and its components	87, 99-103
	GRI 103 – 3	Evaluation of the management approach	93, 99-103

GRI Content Index continued

GRI standard	Disclosure number	Disclosure	Page reference and notes
GRI 401: Employment	GRI 401 – 1	New employee hires and employee turnover	101 <p>A total of 2,850 employees were hired during the reporting period (33.6% hire rate), among them 2,305 (27.14%) were male and 545 (6.42%) were female; 1,102 (12.97%) were younger than 30 y.o., 1,293 (15.22%) were 30-50 y.o., and 455 employees (5.36%) were older than 50; 1,781 (21%) are residents of the Amur region, 917 (10.8%) are residents of other regions of the Far East of Russia, 151(1.78%) are residents of other Russian regions, 1 (0,01%) is a resident of a CIS country.</p> <p>2,809 employee left the company during the reporting period (33.07% turnover rate) during the reporting period, among them 2,293 (26.99%) were male, 516 were female (6.07%); 939 employees were younger than 30 y.o (11.05%), 1,263 employees were 30-50 y.o. (14.87%), 607 employees were older than 50 y.o. (7.15%); 1,803 (21.23%) are residents of the Amur region, 863 (10.16%) are residents of other regions of the Far East of Russia, 143 (1.68%) are residents of other Russian regions.</p>
<i>Occupational health and safety</i>			
GRI 403: Occupational Health and Safety	GRI 403 – 1	Occupational health and safety management system	86, 94, 97, 109-110
	GRI 403 – 2	Hazard identification, risk assessment, and incident investigation	109-111
	GRI 403 – 3	Occupational health services	111
	GRI 403 – 4	Worker participation, consultation, and communication on occupational health and safety	109-110
	GRI 403 – 5	Worker training on occupational health and safety	110
	GRI 403 – 6	Promotion of worker health	111
	GRI 403 – 7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	109-111
	GRI 403 – 9	Work-related injuries	86, 111 <p>Rate of fatalities 2019 - 0; 2018 - 0.07; 2017 - 0.20 Number of recordable injuries 2019 - 25; 2018 - 38; 2017 - 46 Disclosure without the rate and number of high consequence injuries.</p>
<i>Training and education</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	94, 99-102
	GRI 103 – 2	The management approach and its components	99, 102
	GRI 103 – 3	Evaluation of the management approach	93, 99, 102

GRI standard	Disclosure number	Disclosure	Page reference and notes
GRI 404: Training and Education	GRI 404 – 1	Average hours of training per year per employee	102 Disclosure without breakdown of training by gender and employee.
<i>Diversity and equal opportunity.</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	87, 94, 99-101
	GRI 103 – 2	The management approach and its components	99-101
	GRI 103 – 3	Evaluation of the management approach	99-101
GRI 405: Diversity and Equal Opportunity	GRI 405 – 1	Diversity in governance bodies and employees	87, 100, 134, 144 Board breakdown by age: 50-70: 5; 70+: 3.
<i>Non-Discrimination</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	94, 99-100
	GRI 103 – 2	The management approach and its components	87, 99-100
	GRI 103 – 3	Evaluation of the management approach	87, 99-100
GRI 406: Non-discrimination	GRI 406 – 1	Incidents of discrimination and corrective actions taken	Zero.
<i>Freedom of Association and Collective Bargaining</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	94, 103
	GRI 103 – 2	The management approach and its components	103
	GRI 103 – 3	Evaluation of the management approach	103
GRI 407: Freedom of association and collective bargaining	GRI 407 – 1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	103
	GRI 407	Freedom of association and collective bargaining	
<i>Rights of Indigenous Peoples</i>			
	GRI 103 – 1	Explanation of the material topic and its boundary	94, 105-106
	GRI 103 – 2	The management approach and its components	92, 105-106
	GRI 103 – 3	Evaluation of the management approach	93, 105-106
	GRI 411 – 1	Incidents of violations involving rights of indigenous peoples	106
<i>Local communities</i>			
GRI 103: Management Approach	GRI 103 – 1	Explanation of the material topic and its boundary	94, 105
	GRI 103 – 2	The management approach and its components	92, 105-108
	GRI 103 – 3	Evaluation of the management approach	93, 105-106
GRI 413: Local Communities	GRI 413 – 1	Operations with local community engagement, impact assessments and development programmes	105



