PETROPAVLOVSK

PRESS RELEASE

17 May 2021

Petropavlovsk PLC
Annual Results for the Year Ended 31 December 2020

Petropavlovsk PLC ("Petropavlovsk", or the "Company" and, together with its subsidiaries, the "Group") today issues its audited Annual Results for the year ended 31 December 2020.

Mr Denis Alexandrov, CEO said: "*Petropavlovsk delivered a solid financial performance in 2020 despite numerous challenges, with revenue and EBITDA improving substantially year-on-year on the back of a 6% increase in production and higher gold prices.*

Looking ahead, there is much to be addressed to drive improvement across the business in 2021 and beyond. From a cash flow perspective, one of our immediate opportunities is maximising utilisation of the POX Hub using our own refractory gold concentrates to reduce reliance on lower-margin third-party material via the successful on-schedule delivery of two major projects – the Pioneer flotation plant later this year and the Malomir flotation plant expansion next year. In addition, we continue to assess the development of our other assets, with the Albyn hub in particular having great potential that has not previously been fully considered.

The new management team continues to make progress enhancing operational governance and I am confident that the ongoing business review will present further opportunities to deliver greater transparency and efficiencies throughout the organisation."

Financial Highlights

		FY 2020	FY 2019	% Change
Own gold production	koz	**385.6**	471.6	(18%)
Production from third-party concentrates	koz	**162.5**	45.7	256%
Total gold produced	koz	**548.1**	517.3	6%
Total gold sold	koz	**546.5**	514.0	6%
Avg. realised gold price♦	US$/oz	**1,748**	1,346	30%
Total cash costs for own material	US$/oz	**852**	703	21%
Total cash costs for third-party concentrate	US$/oz	**1,474**	1,260	17%
Total Cash Costs♦	US$/oz	**1,034**	749	38%
All-in Sustaining Costs♦	US$/oz	**1,312**	1,020	29%
Group revenue (including non-precious operations)	US$m	**988.5**	741.6	33%

♦*See "The Use and Application of Alternative Performance Measures (APMs)" section for further information on our APMs*

Underlying EBITDA♦	US$m	**350.7**	264.8	32%
Operating profit	US$m	**148.0**	150.7	(2%)
(Loss) / profit for the period	US$m	**(48.9)**	25.7	n/m
Capital expenditure♦	US$m	**117.8**	103.8	13%
Cash generated from operations before working capital changes	US$m	**328.5**	250.5	31%
Cash generated from operations	US$m	**156.3**	95.4	64%
Net debt♦	US$m	**500.6**	561.3	(11%)

- **Total gold produced:** up 6% to 548.1koz, comprising an 18% decline to 385.6koz of own gold produced and a 256% increase to 162.5koz of gold produced from the processing of third-party refractory gold concentrates at the POX Hub
- **Total gold sales:** up 6% to 546.5koz driven by the increase in gold production
- **Average realised gold price♦**: increased 30% to US$1,748/oz with zero impact from the Company's hedging programme
- **Total cash costs (own material):** up 21% to US$852/oz and in-line with guidance, primarily driven by an 18% decline in gold sold, an expected decline in processed grades at Albyn which was depleted in 2020, lower grades of non-refractory ore at Malomir, an increase in mining tax as subsidies expired at Albyn and Malomir and cost inflation. This was partly offset by higher grades and recoveries at Pioneer and the benefit of Rouble depreciation
- **Total cash costs (third parties):** increase of 17% to US$1,474/oz reflecting the significant increase in gold prices in 2020
- **Total Cash Costs (TCC)♦ (own material and third parties)**: increased 38% to US$1,034/oz due to higher TCC for own material and third-party concentrates
- **All-in Sustaining Costs (AISC)♦**: up 29% to US$1,312/oz driven by the increase in TCC♦, with total sustaining capital, sustaining lease and capitalised stripping expenditures remaining approximately in-line with total sustaining capital and capitalised stripping expenditures in 2019, where capitalised stripping expenditures refer to stripping costs incurred in prior periods that improved access to ore mined in 2020
- **Group revenue (including non-precious operations):** up 33**%** to US$988.5m, reflecting the increase in gold sales and higher realised gold prices
- **Underlying EBITDA**: increased 32% to US$350.7m driven by an increase in revenues which were partly offset by higher costs
- **Profit for the period**: decreased to a loss of US$(48.9)m (FY 2019: US$25.7m), primarily due to the impact of the following non-cash items: a US$42.8 million loss on the fair value re-measurement of the conversion option of the convertible bonds (2019: US$31.1m); an impairment of mining and exploration and evaluation assets of US$74.9m driven by an adjustment in the valuation of the Albyn and Elginskoye projects where additional exploration and geological modelling has demonstrated that an earlier than anticipated switch to refractory processing at Elginskoye will be required due to a higher proportion and an uneven distribution of refractory ore as part of the overall deposit; and, following a re-classification of a 29.9% interest in IRC as assets held for sale, a US$55.8m write-down (2019: nil) to adjust the carrying value of net assets of the disposal group to fair value less costs to sell. For illustrative purposes

♦*See "The Use and Application of Alternative Performance Measures (APMs)" section for further information on our APMs* the primary non-cash adjustments to the (Loss)/profit for the period are presented in the table below.

US$m	FY 2020	FY 2019
(Loss)/profit for the period	**(48.9)**	25.7
add back:		
Reversals of impairment - guarantee arrangements	**(1.0)**	(30.8)
Net fair value losses - conversion option, TEMI option and IRC guarantee	**53.2**	29.5
Impairment/(reversal) of impairment	**74.9**	(52.2)
Write down to adjust the carrying value of net assets of disposal group to fair value less costs to sell (IRC)	**55.8**	-
Share of results of associate	**(52.7)**	35.4
Foreign exchange (gains)/losses	**(32.6)**	20.8
Deferred taxation	**27.4**	(2.4)
Profit for the period excluding primary non-cash items	**76.1**	26.0

- **Capital expenditure**♦: increased 13% to US$117.8m, above guidance of US$90m – US$100m with spending primarily focussed on the construction of flotation plants at Malomir and Pioneer, development activities at Elginskoye and spending to support underground mining at Pioneer and Malomir
- **Cash generated from operations before working capital changes:** increased significantly by 31% to US$328.5m reflecting growth in EBITDA
- **Cash generated from operations:** increased 64% to US$156.3m, with the primary working capital movement being repayment of interest-bearing gold prepays
- **Net debt**♦: reduction to US$500.6m as at 31 December 2020, principally driven by partial conversion of the US$125m Convertible Bonds
- **Gold prepays**: the Company continued to settle the interest-bearing gold prepays which stood at US$63.8m as at 31 December 2020 (US$187.4m as at 31 December 2019), a net decrease of US$123.6m over the period

POX Hub

Maximising utilisation of the POX Hub

- Maximising utilisation of the POX Hub remains one of the Company's key priorities to reduce reliance on low-margin third-party concentrates
- As updated on 20 April 2021, commissioning of the Pioneer flotation plant is scheduled for Q2 2021 and will double the Group's capacity to process refractory ore from its own mines to 7.2Mtpa once operational. Construction of a third line at the Malomir flotation plant will add an additional 1.8Mtpa of flotation capacity from Q3 2022, bringing the total combined Group capacity to 9.0Mtpa
- A pre-feasibility study accompanied by a drilling and exploration programme is to be undertaken in 2021 at Albyn and Elginskoye given its significant potential to become a third source of refractory gold to supply the POX Hub which has not previously been fully considered

Corporate and Business Update

♦ *See "The Use and Application of Alternative Performance Measures (APMs)" section for further information on our APMs*

Business review and enhancing operational governance

- The ongoing business review being undertaken following the appointment of Denis Alexandrov as CEO and a new management team will present further opportunities to deliver greater transparency and efficiencies throughout the organisation. These opportunities include:
  - Simplifying the corporate structure, improving management systems, standardising processes and reducing G&A costs;
  - A new medium-term corporate development strategy to be delivered by Q3 2021 and followed by the proposal of a dividend policy; and
  - Completion of a full management restructuring by the end of Q2 2021, including addressing management oversight and talent gaps within the existing structure and adding critical core competencies that were missing within the management team

Other

- In its Q1 2021 Trading Update released on 29 April 2021, IRC Limited (31.1% owned by Petropavlovsk) announced that it had paid c.US$8.5m to Gazprombank as principal loan repayment and interest payments during the quarter. This is in accordance with the repayment schedule for the loan facility agreements guaranteed by Petropavlovsk. A US$5m fee was paid during the quarter to Petropavlovsk for guaranteeing the facility agreements
- On 19 April 2021, the Company announced the appointment of Mr. Mikhail Irzhevsky as an independent non-executive director with effect from 16 April 2021. Following his appointment to the board, he has also become a member of the audit, remuneration and nominations committees and Mr. Maxim Kharin has stepped down from the audit committee.

2021 Guidance

- **Production**: remains on track to meet full year guidance of 430 - 470koz and comprises 370 - 390koz of own gold production which is in-line with 2020, and 60 - 80koz of gold from third-party concentrate which is lower than in 2020
- **Costs**: own gold TCC expected to be in the range of US$870 – US$970/oz, excluding third-party concentrate as the pricing of concentrate depends on the highly volatile gold price
- **Capital expenditure**: US$140m, consisting of sustaining and development capex of US$120m and exploration spend of c.US$20m

2020 Reserves & Resources Update

- At 31 December 2020, the Company's internal estimate of total Group Mineral Resources (including Reserves) decreased 7% to 19.50Moz of gold (end of 2019: 21.03Moz) and total Reserves decreased 15% to 7.16Moz of gold (end of 2019: 8.46Moz)
- The decrease in Mineral Resources is due to mine depletion, a re-evaluation of Mineral Resources at Tokur from JORC Code 2004 to JORC Code 2012 and the adoption of more conservative open pit constraint assumptions for reporting Elginskoye Resources
- The decrease in Ore Reserves is due to mine depletion and a more prudent approach to reporting, including removal low grade stockpiles, Quartzitovoye open pit, Malomir RIP tailings and Tokur Reserves from the statement
- None of the decrease in Ore Reserves resulting from the more prudent approach to reporting were scheduled to be mined and hence the resulting decrease has no material impact on the Group's production plans

- A summary of our Reserves and Resources tables is shown below and a breakdown by each asset may be found on our website at: https://petropavlovskplc.com/development-exploration-reserves-and-resources/reserves-and-resources/

2020 Exploration Update

Exploration in 2020 was focused on extending and defining known mineralisation at or around existing mining operations, as well as regional programs aimed at increasing our understanding of earlier stage deposits close to existing mining centers. This work included drilling, trenching and metallurgical studies to understand the nature of the ore and how its responds to either refractory or non-refractory processing

Highlights at Pioneer include partial conversion of the Pokrovka 2 orebody to reserves which are due to be mined in 2021-2022, and possible extensions to underground mineralisation at NE Bakhmut zones 2 & 3 which are currently being mined. In addition, mineralisation at Alexandra was extended down dip with results indicating there is potential to further expand ore reserves at this zone

At Albyn, significant drilling and metallurgical test work was undertaken to understand the nature of the Elginskoye orebody and the optimal processing route. Initial studies indicate an increasing portion of the orebody appears to respond well to gravity-flotation-POX rather than the RIP processing route. Drilling at Unglichikanskoye confirmed down-dip extensions to the southern group of mineralised zones which is expected to increase mineral resources at the project once the results have been incorporated

At Malomir, work continued to increase confidence in the Tokur, Osipkan and Mariinskoye potential satellite deposits to upgrade these deposits in terms of resources and reserves

Conference Call and Webcast

The Company's CEO Denis Alexandrov and CFO Danila Kotlyarov will host a webcast followed by a Q&A session to present the Company's financial results today at 09:00 BST / 11.00 MSK. The webcast can be accessed via the following link:
https://webcasting.brrmedia.co.uk/broadcast/60785e9b0386285386cc9077.

Alternatively, phone users can listen to the webcast and participate in the Q&A session via the following numbers:

United Kingdom dial-in number	+44 (0) 330 336 9434
Russian dial-in number	+7 495 213 1767

When prompted, please use the following confirmation code: 1291065

About Petropavlovsk

Petropavlovsk PLC (LSE: POG. MOEX: POGR) is a major integrated Russian gold producer with JORC Resources of 19.50Moz Au which include Reserves of 7.16Moz Au. Following its IPO on the Alternative Investment Market (AIM) in 2002, Petropavlovsk was promoted to the London Stock Exchange in 2009, where today it is a Premium Listed company and a constituent of the FTSE 250, FTSE 350 and FTSE All Share indices. The Company's shares also trade on the Moscow Exchange and are a constituent of the RTS Index and MOEX Russia Index.

Petropavlovsk's key operating mines (Pioneer, Malomir and Albyn) are in the Amur Region in the Russian Far East. Petropavlovsk has produced a total of c.8.3Moz of gold since operations began in 1994 and has a strong track record of mine development, expansion and asset optimisation.

The Group recently entered a new era of growth following the successful commissioning and start-up of its flagship asset, the Pressure Oxidation (POX) Hub at Pokrovskiy, which enables the processing of the Company's abundant refractory reserves and resources.

Petropavlovsk is one of the region's largest employers and one of the largest contributors to the sustainable development of the local economy.

For more information

Please visit www.petropavlovskplc.com or contact:

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Cautionary note on forward-looking statements

This release may include statements that are, or may be deemed to be, "forward-looking statements". These forward-looking statements can be identified by the use of forward-looking terminology, including the terms "believes", "estimates", "plans", "projects", "anticipates", "expects", "intends", "may", "will" or "should" or, in each case, their negative or other variations or comparable terminology, or by discussions of strategy, plans, objectives, goals, future events or intentions. These forward looking statements include all matters that are not historical facts. They appear in a number of places throughout this release and include, but are not limited to, statements regarding the Group's intentions, beliefs or current expectations concerning, among other things, the future price of gold, the Group's results of operations, financial position, liquidity, prospects, growth, estimation of mineral reserves and resources and strategies, and exchange rates and the expectations of the industry. By their nature, forward-looking statements involve risk and uncertainty because they relate to future events and circumstances outside the control of the Group. 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 release. 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 release, those developments may not be indicative of developments in subsequent periods. A number of factors could cause results and/or developments to differ materially from those expressed or implied by the forward-looking statements including, without limitation, the impact of the current Covid-19 pandemic, general economic and business conditions, demand, supply and prices for gold and other long-term commodity price assumptions (and their effect on the timing and feasibility of future projects and developments), trends in the gold mining industry and conditions of the international gold markets, competition, actions and activities of governmental authorities (including changes in laws, regulations or taxation), currency fluctuations (including as between the US Dollar and Rouble), the Group's ability to recover its reserves or develop new reserves, changes in its business strategy, any litigation, and political and economic uncertainty. Except as required by applicable law, rule or regulation (including the Listing and Disclosure Guidance and Transparency Rules), the Group does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Past performance cannot be relied on as a guide to future performance. The content of websites referred to in this announcement do not form part of this announcement.

Financial Review

Despite the many difficulties related to the COVID-19 pandemic and corporate changes within the Group, 2020 was a further year of strong headline financial performance by Petropavlovsk.

Helped by strong gold prices and increases in production volumes attributable to improved POX capacity utilisation, the company's revenues increased by 33% YoY (2019 YoY: 48% increase), resulting in an increase in EBITDA, which improved by 32% YoY (2019 YoY: 45%). This has enabled the company to continue its trend of significant deleveraging, reaching a Net debt/EBITDA of 1.4x, as at 31 December 2020 (2019: 2.1x), which is the lowest in the company's recent history.

In line with its strategy, the company has also prioritised the repayment of its interest-bearing gold advances, decreasing this amount by US$123.6 million over 2020, with the remaining balance at the end of 2020 being US$63.8 million (2019: US$187.4 million). Together with the partial conversion of the convertible bonds, this helped decrease the total amount of interest paid in 2020 by 14% to US$58.1 million (2019: US$67.2 million).

Cash generated from operations before working capital ("WC") changes increased significantly to US$328.5 million (2019:US$250.5 million) reflecting the growth in EBITDA. In line with the Group's 2020 capital allocation priorities, this cash was used primarily to repay the gold advances and fund capital expenditures aimed at increasing the Group's refractory ore processing capabilities, including: the Pioneer flotation plant, initial spending for a third flotation line at Malomir, POX plant upgrades, as well as development of the Elginskoye deposit in advance of the planned transfer of mining operations from the depleted Albyn deposit to Elginskoye.

Reducing the cost of debt remains a key priority in 2021, with the Group aiming to significantly optimise its debt and portfolio of liquidity sources by converting the gold advances credit limit with Gazprombank into Revolving Credit Facilities ("RCF") at much more favourable terms which reflect the strong fundamentals of the business. This work is already proceeding with the Group entering into a RCF agreement with a c.US$67 million limit with Gazprombank in April 2021, with the aim of increasing this amount substantially by the end of the year.

The significant strengthening of the company's balance sheet will allow the Group to address the refinancing of its US$500 million notes due November 2022 on significantly more favourable terms. That is a key priority for the company and detailed plans are being discussed to be actioned in H2 2021.

Cost control remains a management priority; however, TCC for own gold production increased 21% to US$852/oz, reflecting an 18% decline in the volume of own gold sold, the effect of lower grades of non-refractory ore processed at Albyn and Malomir and lower grades of refractory ore processed at Malomir, the impact of inflation of certain Rouble denominated costs, and the effect of higher mining taxes paid. This effect was partially mitigated by the effect of higher grades and recoveries of non-refractory ore processed at Pioneer and the effect of higher recoveries of refractory ore processed at Malomir, as well as by the effect of Rouble depreciation.

The company has showed a net loss of US$(48.9) million (2019: net profit of US$25.7 million) that has primarily resulted from the following three non-cash items: a) US$42.8 million loss on the fair value re-measurement of the convertible option of the convertible bonds (2019: US$31.1 million) which resulted primarily from the increase in the share price of the company, as the conversion option of the convertible bonds represents the fair value of the embedded option for the bondholders to convert into the equity of the company. As the company can elect to pay the cash value in lieu of delivering the ordinary shares following exercise of the conversion right, the conversion option is a derivative liability. Accordingly, the conversion option is measured at fair value with the relevant loss included in net other finance (losses) / gains; b) impairment of mining and exploration and evaluation assets of US$74.9 million driven by an adjustment in the valuation of the Albyn and Elginskoye projects, which were historically accounted as a single cash generating unit ("CGU"), with assets being depreciated on the basis of reserves unit-of-production using the combined Albyn and Elginskoye reserve base. The valuation adjustment happened as a result of additional exploration and geological modelling which showed a decrease in average grades, an increase in the proportion of refractory ores as well as uneven distribution of refractory and non-refractory ores. That resulted in an earlier than anticipated switch to processing refractory ore from Elginskoye, which dictated the necessity to allocate part of the POX assets to the Albyn CGU and, combined, these factors led to the impairments being recognised. It is important to note that the Elginskoye deposit is underexplored and currently significant exploration works are planned for 2021, targeting the conversion of resources to reserves, increasing resources as well as clarifying the metallurgical quality of all types of ore. As such, the current production plan for Albyn is intermediate and significant changes are expected by the end of 2021; and c) following a re-classification of a 29.9% interest in IRC as assets held for sale, the Group recognised a US$55.8 million write-down to adjust the carrying value of net assets of disposal group to fair value less costs to sell.

Note: Figures may not add up due to rounding

Financial Highlights

		2020	2019
Gold sold	'000oz	546.5	514.0
Group revenue	US$ million	988.5	741.6
Average realised gold price	US$/oz	1,748	1,346
Average LBMA gold price afternoon fixing	US$/oz	1,770	1,393
Total Cash Costs◆ (a)	US$/oz	1,034	749
Total cash costs from own material (a)	US$/oz	852	703
Total cash costs from third parties concentrate (a)	US$/oz	1,474	1,260
All-in Sustaining Costs◆ (b)	US$/oz	1,312	1,020
All-in Costs◆ (b)	US$/oz	1,451	1,103
Underlying EBITDA◆	US$ million	350.7	264.8
Operating profit (c)	US$ million	148.0	150.7
Profit before tax	US$ million	27.2	52.9
(Loss)/profit for the year	US$ million	(48.9)	25.7
(Loss)/profit for the year attributable to equity shareholders of Petropavlovsk PLC	US$ million	(45.6)	26.9
Basic (loss)/profit per share	US$	(0.01)	0.01

Cash generated from operations before working capital changes	US$ million	328.5	250.5
Net cash from operating activities	US$ million	156.3	95.4

(a) Calculation of Total Cash Costs' ("TCC") is set out in the section Hard rock mines 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) In the 2020 Annual Report operating profit is now presented from the perspective of Group operations excluding the results of the associate, IRC. This is more representative of how the business is viewed following the classification of IRC as held for sale and this change in classification also been applied to the comparative period.

					31 DECEMBER 2020	31 DECEMBER 2019
Cash and cash equivalents	US$ million				35.4	48.2
Notes (d)	US$ million				(502.0)	(500.4)
Convertible bonds (e)	US$ million				(34.0)	(109.1)
Net Debt◆	US$ million				(500.6)	(561.3)

(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

					2020	2019
Revenue from hard rock mines	US$ million				956.0	692.6
Revenue from other operations	US$ million				32.5	49.0
	US$ million				988.5	741.6

Group revenue during the period was US$988.5 million, 33% higher than the US$741.6 million achieved in 2019.

Revenue from hard rock mines during the period was US$956.0 million, 38% higher than the US$692.6 million achieved in 2019. Gold remains the key commodity produced and sold by the Group, comprising 97% of total revenue generated in 2020. The physical volume of gold sold from hard rock mines increased by 6% from 514,005 oz in 2019 to 546,458 oz in 2020. The average realised gold price◆ increased by 30% from US$1,346/ oz in 2019 to US$1,748/oz in 2020. The average realised gold price◆ was not affected by hedge arrangements (2019: US$(61)/oz). Hard rock mines sold 23,891 oz of silver in 2020 at an average price of US$27/oz, compared to 56,568 oz in 2019 at an average price of US$15/oz.

Revenue generated as a result of third- party work by the Group's in-house service companies was US$32.5 million in 2020, a US$(16.5) million decrease compared to US$49.0 million in 2019. 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$30.0 million in 2020 compared to US$45.1 million in 2019.

Cash Flow Hedge Arrangements

In March 2020 the Group entered into a number of gold option and currency option contracts, in both cases structured as zero cost collars where the company purchased a put option and sold a call option, in order to increase certainty in respect of a proportion of its operating cash flows.

Zero cost collars for the underlying aggregate of US$63 million (US$7 million per month for the period from April to December 2020) with a RUB:USD exercise price of RUB75.00 for put options and a RUB:USD exercise price in the range of between RUB90.65 and RUB100.00 for call options matured during 2020 and resulted in US$1.4 million net cash settlement received by the Group.

Zero cost collars for the underlying aggregate of US$84 million (US$7 million per month until December 2021) with a RUB:USD exercise price of RUB75.00 for put options and a RUB:USD exercise price in the range between RUB90.65 and RUB100.00 for call options were outstanding as at 31 December 2020.

Zero cost collars for the underlying aggregate of 31,500 oz of gold (3,500 oz of gold per month for the period from April to December 2020) with an exercise price of US$1,600/ oz for put options and US$1,832/oz for call options matured during 2020 and resulted in US$(1.5) million net cash settlement paid by the Group. In 2019 the Group used gold forward contracts as cash flow hedge arrangements which resulted in US$(31.5) million net cash settlement paid by the Group on forward contracts to sell 230,000 oz of gold. Zero cost collars for the underlying aggregate of 42,000 oz of gold (3,500 oz of gold per month until December 2021) with an exercise price of US$1,600/oz for put options and US$1,832/oz for call options were outstanding as at 31 December 2020.

The aforementioned contracts did not qualify for hedge accounting under IFRS 9. Accordingly, there was no adjustment to the average realized gold price in 2020 for the effect of net settlement under these arrangements.

Corresponding fair values for gold and currency option contracts are disclosed in note 18 to the Group's consolidated financial statements for the year ended 31 December 2020.

	UNDERLYING AGGREGATE AMOUNT	PUT OPTION EXERCISE PRICE	CALL OPTION EXERCISE PRICE
Option contracts matured in 2020:			
Gold option contracts	31,500 oz (3,500 oz of gold per month for the period from April to December 2020)	US$1,600/oz	US$1,832/oz
Currency option contracts	US$63 million (US$7 million per month for the period from April to December 2020)	RUB75.00	RUB90.65 - RUB100.00
Option contracts outstanding as at 31 December 2020:			
Gold option contracts	42,000 oz of gold (3,500 oz of gold per month until December 2021)	US$1,600/oz	US$1,832/oz
Currency option contracts	US$84 million (US$7 million per month until December 2021)	RUB75.00	RUB90.65 - RUB100.00

Underlying EBITDA◆

	2020 US$ MILLION	2019 US$ MILLION
(Loss)/profit for the period	(48.9)	25.7
Add/(less):		
Net impairment reversals on financial instruments	(1.0)	(30.8)
Investment and other finance income	(7.8)	(8.8)
Interest expense	58.5	59.9
Net other finance losses [(a)]	68.0	42.2
Foreign exchange (gains)/losses	(32.6)	20.8
Taxation	76.1	27.2
Depreciation	134.1	137.8
Impairment/(reversal of impairment) of mining assets and in-house service	58.8	(52.2)
Impairment of exploration and evaluation assets	16.1	-
Write-down of inventory to net realisable value	1.2	-
Reversal of impairment of ore stockpiles	-	(2.8)
Impairment of gold in circuit	0.1	0.1
Impairment of bullion in process	0.0	-
Write-down to adjust the carrying value of net assets of disposal group to fair value less costs to sell	55.8	-
Share of results of associate [(b)]	(27.7)	45.7
Underlying EBITDA◆	350.7	264.8

(a) Including US$42.8 million fair value loss from re-measurement of the conversion option of the convertible bonds (2019: US$31.1 million).
(b) 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/reversal of impairment recognised against investment in the associate.

Underlying EBITDA◆ as contributed by segment and the associate is set out below.

					2020 US$ MILLION	2019 US$ MILLION
Pioneer					119.9	53.3
Malomir					141.1	104.2
Albyn					129.1	149.3
Total Hard rock mines					390.1	306.8
Corporate and other					(64.3)	(52.3)
Underlying EBITDA by segment					325.7	254.5

IRC					25.0	10.3
Underlying EBITDA♦					350.7	264.8

Hard Rock Mines

During the period, hard rock mines generated Underlying EBITDA♦ of US$390.1 million compared to US$306.8 million of Underlying EBITDA♦ in 2019.

Total Cash Costs♦ for hard rock mines increased from US$749/oz in 2019 to US$1,034/oz in 2020.

The increase in Total cash costs from own material from US$703/oz in 2019 to US$852/oz in 2020 primarily reflects the effect of lower grades of non-refractory ore processed at Albyn and Malomir and lower grades of refractory ore processed at Malomir, the impact of inflation of certain Rouble denominated costs, and the effect of mining tax rates as set out below. This effect was partially mitigated by the effect of higher grades and recoveries of non-refractory ore processed at Pioneer and the effect of higher recoveries of refractory ore processed at Malomir, as well as by the effect of Rouble depreciation.

Total cash costs from third parties concentrate increased from US$1,260/oz in 2019 to US$1,474/oz in 2020. Total cash costs from third parties concentrate are directly dependent on gold price which has significantly increased in 2020.

The increase in physical ounces sold from 514,005 oz in 2019 to 546,458 oz in 2020 resulted in US$19.4 million increase in Underlying EBITDA♦. The increase in the average realised gold price♦ from US$1,346/oz in 2019 to US$1,748/oz in 2020 contributed to a further US$220.0 million increase in Underlying EBITDA♦. This effect was partly offset by the increase in TCC with US$(156.1) million effect on 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.

The Rouble depreciated against the US Dollar by 12% in 2020 compared to 2019, with the average exchange rate for the period of 72.18 Roubles per US Dollar in 2020 compared to 64.69 Roubles per US Dollar in 2019, somewhat mitigating the effect of Rouble denominated cost 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 which 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. JSC Pokrovskiy Rudnik and LLC Malomirskiy Rudnik applied a full mining tax rate in 2020, LLC Albynskiy Rudnik applied 1.2% mining tax rate from January till August 2020 and a full mining tax rate from September till December 2020, resulting in US$33.8 million mining tax expense compared to US$15.9 million mining tax expense in 2019 when a 1.2% mining tax rate was applied by both LLC Albynskiy Rudnik and LLC Malomirskiy Rudnik and a full mining tax rate by JSC Pokrovskiy Rudnik.

	2020 US$ MILLION	%	2019 US$ MILLION	%
Staff costs	77.6	16	83.2	21
Materials	83.5	17	86.6	22
Flotation concentrate purchased	201.6	41	74.0	19
Fuel	29.3	6	43.3	11
Electricity	33.8	7	34.0	8
Other external services	41.0	8	42.3	11
Other operating expenses	26.8	5	32.0	8
	493.6	100	395.5	100
Movement in ore stockpiles, gold in circuit, bullion in process, limestone and flotation concentrate attributable to gold production	30.0		(34.2)	
Total operating cash expenses	523.6		361.4	

		HARD ROCK MINES				
		PIONEER US$ MILLION	MALOMIR US$ MILLION	ALBYN US$ MILLION	2020 TOTAL US$ MILLION	2019 TOTAL US$ MILLION
Revenue						
Gold		486.2	247.9	221.2	955.4	691.7
Including:						
Gold from own material		212.0	247.9	221.2	681.1	631.4
Gold from 3rd parties concentrate		274.2	-	-	274.2	60.3
Silver		0.3	0.1	0.2	0.6	0.9
		486.5	248.0	221.4	956.0	692.6
Expenses						
Operating cash expenses		352.9	86.3	84.4	523.6	361.4
Refinery and transportation		0.5	0.2	0.2	0.8	0.9
Other taxes		2.3	3.9	1.6	7.8	7.6
Mining tax		11.0	16.6	6.2	33.8	15.9
Depreciation		49.8	53.8	28.0	131.6	135.9
Impairment/(reversal of impairment) of mining assets and in-house service		-	-	58.8	58.8	(42.8)
Impairment of exploration and evaluation assets		-	-	16.1	16.1	-
Impairment/(reversal of impairment) of ore		0.1	-	-	0.1	(2.7)

stockpiles, bullion in process and gold in circuit						
Operating expenses		416.6	160.7	195.2	772.5	476.3
Result of precious metals operations		69.9	87.3	26.2	183.5	216.3
Add/(less):						
Depreciation		49.8	53.8	28.0	131.6	135.9
Impairment/(reversal of impairment) of mining assets and in-house service		-	-	58.8	58.8	(42.8)
Impairment of exploration and evaluation assets		-	-	16.1	16.1	-
Impairment/(reversal of impairment) of ore stockpiles, bullion in process and gold in circuit		0.1	-	-	0.1	(2.7)
Segment EBITDA		119.9	141.1	129.1	390.1	306.8
Physical volume of gold sold, oz		279,364	140,436	126,658	546,458	514,005
Including:						
Gold sold from own material, oz		119,173	140,436	126,658	386,267	471,563
Gold sold from 3rd parties concentrate, oz		160,191	-	-	160,191	42,442
Cash costs						
Operating cash expenses		352.9	86.3	84.4	523.6	361.4
Refinery and transportation		0.5	0.2	0.2	0.8	0.9
Other taxes		2.3	3.9	1.6	7.8	7.6
Mining tax		11.0	16.6	6.2	33.8	15.9
Operating cash costs		366.7	107.0	92.3	565.9	385.8
Deduct: co-product revenue		(0.3)	(0.1)	(0.2)	(0.6)	(0.9)
Total Cash Costs◆		366.3	106.9	92.1	565.3	384.9
Including:						
Total cash costs from own material		130.2	106.9	92.1	329.1	331.5
Total cash costs from 3rd parties concentrate		236.2	-	-	236.2	53.4
TCC◆, US$/oz		1,311	761	727	1,034	749
TCC from own material, US$/oz		1,092	761	727	852	703
TCC from 3rd parties concentrate, US$/oz		1,474	-	-	1,474	1,260

All-In Sustaining Costs◆ and All-In Costs◆

AISC◆ increased from US$1,020/oz in 2019 to US$1,312/oz in 2020. The increase in AISC◆ primarily reflects increase in TCC◆ explained above. Aggregate of sustaining capital expenditures related to the existing mining operations, underground mining projects at Pioneer and Malomir, POX project, Malomir flotation plant, sustaining lease and capitalized stripping expenditure during the period at Malomir and Pioneer remained at approximately the same level as the aggregate of sustaining capital expenditures and capitalized stripping expenditure in 2019.

AIC◆ increased from US$1,103/oz in 2019 to US$1,451/oz in 2020, reflecting the increase in AISC◆ explained above, development expenditure for Elginskoye infrastructure, Pioneer flotation plant, a 3rd flotation line at Malomir and capitalized stripping expenditure in respect of refractory ore at Pioneer. This was partially offset by a decrease in Capital Expenditure◆ in relation to the POX project, with the POX Hub commissioned in 2019 and being considered as sustaining in 2020.

		HARD ROCK MINES				
		PIONEER US$ MILLION	MALOMIR US$ MILLION	ALBYN US$ MILLION	2020 TOTAL US$ MILLION	2019 TOTAL US$ MILLION
Physical volume of gold sold, oz		279,364	140,436	126,658	546,458	514,005
Total Cash Costs◆		366.3	106.9	92.1	565.3	384.9
TCC◆, US$/oz		1,311	761	727	1,034	749
Impairment/(reversal of impairment) of ore stockpiles, bullion in process and gold in circuit		0.1	-	-	0.1	(2.7)
Adjusted operating costs		366.5	106.9	92.1	565.4	382.3
Central administration expenses		31.4	15.8	14.2	61.4	52.5
Capitalised stripping		11.2	22.6	-	33.8	27.1
Close down and site restoration		1.3	0.5	0.1	1.8	1.1
Sustaining exploration expenditures		0.5	-	0.4	0.9	4.1
Sustaining capital expenditure		25.1	18.1	6.0	49.2	57.2
Sustaining lease		0.4	2.1	1.7	4.2	-
All-in Sustaining Costs◆		436.4	165.9	114.5	716.8	524.3
All-in Sustaining Costs◆, US$/oz		1,562	1,181	904	1,312	1,020
Exploration expenditure◆		-	3.1	5.7	8.8	10.1
Capital expenditure◆		23.1	3.5	32.2	58.8	32.4
Capitalised stripping		8.7	-	-	8.7	-
All-in Costs◆		468.2	172.5	152.4	793.1	566.8
All-in Costs◆, US$/oz		1,676	1,228	1,203	1,451	1,103

Corporate and other

Corporate and other operations contributed US$(64.3) million to Underlying EBITDA in 2020 compared to US$(52.3) million in 2019. Corporate and other operations primarily include central administration function, results of in-house service companies 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$8.8 million from US$52.5 million in 2019 to US$61.4 million in 2020.

Results of Associate

The Group's share of profit generated by IRC is US$52.7million, including US$23.6 million effect from partial reversal of impairment at K&S mine and a further US$21.4 million reversal of impairment of investment in IRC (2019: US$(12.0) million share of losses generated by IRC and a further US$23.4 million impairment of investment in IRC). Following re-classification of 29.9% interest in IRC as assets held for sale, the Group recognised a US$55.8 million write-down to adjust the carrying value of net assets of disposal group to fair value less costs to sell. IRC contributed US$25.0 million to the Group's Underlying EBITDA* in 2020 (2019:US$10.3 million).

Impairment Review

Impairment of Mining Assets

At 31 December 2020 the Group undertook a review of impairment indicators of the 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 an impairment in relation to Albyn CGU was required. This was primarily driven by latest changes in the geological block model, including decrease in average grade of both non-refractory and refractory ore, essential changes in the proportion of the non-refractory and refractory ore, uneven distribution of non-refractory and refractory ore bodies, which lead to the deficit of non-refractory ore to fill the Albyn RIP Plant after 2024 and the requirement to move the construction of the flotation line from 2027 to 2023 with consequent re-scheduling of the commissioning of the flotation line from January 2028 to January 2024.

All these factors lead to the increase of the operating and capital costs of the Albyn CGU and corresponding decrease of its recoverable amounts, and combined with increased carrying values of the Albyn CGU due to the proportional allocation of the POX Hub facilities, resulted in the corresponding impairment as set out below.

As at 31 December 2020, the Group recognised a pre-tax impairment of an aggregate of US$74.9 million to the extent that recoverable amounts no longer supported the relevant carrying values of assets that are part of Albyn CGU as set out below:

- US$58.8 million (US$47.0 million post- tax) has been recorded against the associated assets within property, plant and equipment; and
- US$16.1 million (US$12.9 million post- tax) has been recorded against the associated exploration and evaluation assets.

As at 31 December 2019, the Group recognised impairment reversals at the Pioneer CGU and the supporting in-house service companies of US$43.5 million (US$34.8 million post-tax) and US$9.4 million (US$7.8 million post-tax), respectively.

Impairment of Exploration and Evaluation Assets

As at 31 December 2020, the Group performed a review of its exploration and evaluation assets and concluded no impairment was required, except as referred to above (31 December 2019: the Group performed a review of its exploration and evaluation assets and concluded no impairment was required).

Exploration and evaluation assets in the statement of financial position primarily relate to the areas adjacent to the existing mines.

Financial Income and Expenses

INVESTMENT AND OTHER FINANCE INCOME					2020 US$ MILLION	2019 US$ MILLION
Investment income [(a)]					1.1	3.2
Guarantee fee income [(b)]					6.7	5.6
					7.8	8.8

(a) Interest income on bank deposits.
(b) Guarantee fee income under Gazprombank Guarantee agreements, as set out in section "Corporate activities" below.

Interest Expense

					2020 US$ MILLION	2019 US$ MILLION
Interest expense					61.9	71.6
Interest capitalised					(4.1)	(12.3)
Other					0.8	0.6
					58.5	59.9

Interest expense for the period comprised of US$42.2 million of effective interest on the Notes, US$9.2 million of effective interest on the Convertible Bonds, US$9.9 million of interest on prepayments on gold sale agreements and US$0.5 million interest on finance lease (2019: 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). As the Group continued with construction of Elginskoye infrastructure, Pioneer flotation plant, 3rd flotation line at Malomir, these projects met eligibility criteria for borrowing costs capitalization under IAS 23 "Borrowing Costs" with US$4.1 million of interest expense capitalized within property, plant and equipment (2019: US$12.3 million of interest expense was capitalised within property, plant and equipment).

Net Other Finance Gains/(Losses)

Net other finance losses for the period totalled US$(68.0) million compared to US$(42.2) million of net other finance losses in 2019. Key elements of other finance gains and losses this period include:

— US$(42.8) million fair value non-cash loss from re-measurement of the conversion option of the convertible bonds;

— US$(11.0) 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$(9.5) million loss on bonds conversion;

— US$(7.0) million fair value loss on gold option contracts;

— US$4.1 million fair value gain on currency option contracts;

— US$(1.7) million net other losses.

Net Impairment Reversals on Financial Instruments

In 2020, the Group recognised US$0.3 million reversal of impairment of financial assets (2019: US$2.3 million reversal of impairment of financial assets) and net of US$0.7 million reversal of provision for expected credit losses under Gazprombank guarantee arrangements (2019: US$28.5 million reversal of provision for expected credit losses under Gazprombank and ICBC guarantee arrangements).

Taxation

					2020 US$ MILLION	2019 US$ MILLION
Tax charge					76.1	27.2

The Group is subject to corporation tax under the UK, Russia and Cyprus tax legislation. The statutory tax rate for 2020 was 19% in the UK and 20% in Russia.

The tax charge for the period primarily related to the Group's gold mining operations and is represented by a current tax charge of US$48.7 million (2019: US$29.7 million) and a deferred tax charge, which is a non-cash item, of US$27.4 million (2019: deferred tax credit of US$2.4 million). Included in the deferred tax charge in 2020 is a US$33.1million charge (2019: US$20.4 million credit) from the effect of foreign exchange 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.

The effective tax rate was also affected by expenses that are not deductible for tax purposes which primarily relate to fair value losses on re-measurement of the conversion option of the Convertible Bonds and write-down of investment in IRC to fair value less costs to sell, effect of tax losses for which no deferred income tax asset was recognised which primarily related to interest expense incurred in the UK and Russian withholding tax on intercompany dividends.

During the period, the Group made corporation tax payments in aggregate of US$56.5 million in Russia (2019: corporation tax payments in aggregate of US$32.7 million in Russia).

Earnings per Share

					2020	2019
(Loss)/profit for the period attributable to equity holders of Petropavlovsk PLC					US$(45.6) million	US$26.9 million
Weighted average number of Ordinary Shares					3,564,250,949	3,309,193,559
Basic (loss)/profit per ordinary share					US$(0.01)	US$0.01

Basic loss per share for 2020 was US$(0.01) compared to US$0.01 basic profit per share for 2019. The total number of Ordinary Shares in issue as at 31 December 2020 was 3,957,270,254 (31 December 2019: 3,310,210,281).

Financial Position and Cash Flows

					31 DECEMBER 2020 US$ MILLION	31 DECEMBER 2019 US$ MILLION
Cash and cash equivalents					35.4	48.2
Notes [a]					(502.0)	(500.4)
Convertible bonds [b]					(34.0)	(109.1)
Net Debt◆					(500.6)	(561.3)

(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.

					2020 US$ MILLION	2019 US$ MILLION
Net cash from operating activities					156.3	95.4
Net cash used in investing activities [c]					(159.1)	(84.7)
Net cash (used in)/from financing activities					(6.3)	8.9

(c) Including US$117.8 million Capital Expenditures◆ (2019: US$103.8 million)

Key Movements in Cash and Net Debt◆

	CASH US$ MILLION	DEBT US$ MILLION	NET DEBT◆ US$ MILLION
As at 1 January 2020	48.2	(609.5)	(561.3)
Net cash generated by operating activities before working capital changes	328.6		
Changes in working capital	(62.7)		
Corporation tax paid	(56.5)		
Capital Expenditure◆	(117.8)		
Capitalized stripping	(42.5)		
Bonds conversion		77.5	
Interest accrued		(51.5)	
Interest paid	(58.1)[d]	47.4	
ICBC Guarantee fee	5.0		
Interest received	1.1		
Other	(9.9)		
As at 31 December 2020	35.4	(536.0)	(500.6)

(d) Including US$10 million interest paid in relation to advance payments from Gazprombank and Sberbank.

Capital Expenditure

The Group invested an aggregate of US$117.8 million in 2020 compared to US$103.8 million in 2019. The key areas of focus in this period were on Pioneer and Malomir flotation, Elginskoye mine development and development to support the underground mining at Pioneer. The Group capitalised US$4.1 million of interest expense incurred in relation to the Group's debt into the cost of construction of Elginskoye infrastructure, Pioneer flotation plant, 3rd flotation line at Malomir (2019: 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).

				EXPLORATION EXPENDITURE US$ MILLION	DEVELOPMENT EXPENDITURE AND OTHER CAPEX◆ US$ MILLION	TOTAL CAPEX◆ US$ MILLION
POX				-	5.6	5.6
Pioneer [a], [b]				0.5	42.5	43.0
Malomir [c], [d], [e]				0.8	16.4	17.2
Albyn [f]				6.1	36.6	42.7
Other				2.3	-	2.3
Corporate and in-house services				-	7.0	7.0

Total				9.7	108.0	117.8

(a) Including US$0.2M of exploration in relation to Pioneer Underground project, US$6.9M of development expenditure in relation to underground project to be sustaining capital expenditure for the purposes of calculating AISC◆ and AIC◆.
(b) Including US$23.1M of development expenditure in relation to Pioneer Flotation project (US$17.4M of expenditure in relation to flotation and US$5.7M of expenditure in relation to hydrotechnical storage facilities) to be non-sustaining capital expenditure for the purposes of calculating AISC◆ and AIC◆.
(c) Including US$2.0M of development expenditure in relation to Malomir Underground project to be sustaining capital expenditure for the purposes of calculating AISC◆ and AIC◆.
(d) Including US$7.1M of development expenditure in relation to Malomir flotation (US$2.6M of expenditure in relation to flotation and US$4.5M of expenditure in relation to hydrotechnical storage facilities) which is considered to be sustaining capital expenditure for the purposes of calculating AISC◆ and AIC◆.
(e) Including US$3.5M of development expenditure in relation to Malomir 3rd line flotation which is considered to be non-sustaining capital expenditure for the purposes of calculating AISC◆ and AIC◆.
(f) Including US$5.7M of exploration expenditure in relation to Elginskoye, US$21.5M of development expenditure in relation to road between Elginskoye and Albyn processing facilities, US$9.8M of development expenditure in relation to hydrotechnical storage facilities for Elginskoye project and US$0.9M in relation Albyn processing facilities , which are considered to be non-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 2020	31 DECEMBER 2019
GB Pounds Sterling (GBP: US$)					0.73	0.75
Russian Rouble (RUB: US$)					73.88	61.91

The Rouble depreciated by 19% against the US Dollar during 2020, from RUB61.91: US$1 as at 31 December 2019 to RUB73.88 : US$1 as at 31 December 2020. The average period-on-period depreciation of the Rouble against the US Dollar was approximately 12%, with the average exchange rate for 2020 being RUB72.18 : US$1 compared to RUB64.69 : US$1 for 2019. The Group recognised foreign exchange gains of US$32.6 million in 2020 (2019: US$21.0 million losses) arising primarily on Rouble denominated net monetary liabilities (including advance payments received from Gazprombank and Sberbank under gold sales agreements).

Corporate Activities

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’). Under the terms of the arrangement the Group was entitled to receive an annual fee equal to 1.75% of the outstanding amount.

In March 2019, IRC 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. The outstanding loan principal was US$204 million as at 31 December 2020.

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. 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 years ended 31 December 2020 and 2019 was calculated at the annual rate of 3.07% by reference to the average outstanding principal balance under Gazprombank Facility. The guarantee fee charged for the year ended 31 December 2020 was US$6.7 million, with corresponding value of US$6.3 million after provision for expected credit losses (2019: US$$5.6 million, with corresponding value of $5.0 million after provision for expected credit losses).

The following assets and liabilities have been recognised in relation to the ICBC Guarantee and Gazprombank Guarantee as at 31 December 2020 and 31 December 2019:

	31 DECEMBER 2020 US$ MILLION	31 DECEMBER 2019 US$ MILLION
Other receivables – ICBC Guarantee	0.0	4.4
Other receivables – Gazprombank Guarantee	11.9	5.0
Financial guarantee contract – Gazprombank Guarantee [(a)]	(8.2)	(8.9)

(a) Classified as “held for sale” and presented separately in the statement of financial position as at 31 December 2020.

Potential Disposal of Interest in IRC

On 18 March 2020, the Group signed 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. 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.

Throughout 2020, the Group has continued to explore disposal options for the interest in IRC and further engaged with several parties to dispose of the equity holding and release the Group’s obligation to guarantee IRC’s external debt under the Gazprombank Facility (note 26). Following negotiations with several interested parties the directors resolved to approve the potential disposal of 29.9% investment in IRC. In the opinion of the directors it is highly probable this disposal to be completed within 12 months after the reporting date and accordingly 29.9% investment in IRC together with the financial guarantee contract were considered to be a disposal group held-for-sale under IFRS 5 “Non-current Assets Held for Sale and Discontinued Operations” as at 31 December 2020.

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 Agestinia 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 in 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 2020, the fair value of the derivative financial asset was US$nil.

Partial Conversion of US$125 Million Convertible Bonds

The company has received Conversion Notices in respect of the exercise of conversion rights under the US$125 million Convertible Bonds. The principal amount of the Convertible Bonds in respect of which the Conversion Notices have been served amounted to an aggregate of US$87 million, which, at a fixed exchange price of US$0.1350 per ordinary share, resulted in the issue and allotment of an aggregate of 644,444,432 new ordinary shares.

Going Concern

Please refer to the note 2 to the Group's consolidated financial statements for the year ended 31 December 2020.

2021 Outlook

Production outlook is on track to meet the full year target of 430 – 470koz of gold in 2021. The Group expects own metal TCC in 2021 to be in the range of US$870 – US$970/oz, excluding third-party concentrate as the pricing of concentrate depends on highly volatile gold price.

FY 2020 Consolidated Annual Financial Statements

Consolidated Statement of Profit or Loss
For the year ended 31 December 2020

				NOTE	2020 US$'000	2019 US$'000
Group revenue				5	988,534	741,589
Operating expenses				6	(840,494)	(590,853)
Operating profit					148,040	150,736
Share of results of associate				14	52,681	(35,376)
Write-down to adjust the carrying value of net assets of disposal group to fair value less costs to sell				14	(55,798)	-
Net impairment reversals on financial instruments				9	1,000	30,797
Investment and other finance income				9	7,754	8,826
Interest expense				9	(58,533)	(59,854)
Net other finance losses				9	(67,957)	(42,190)
Profit before taxation					27,187	52,939
Taxation				10	(76,069)	(27,246)
(Loss)/profit for the year					(48,882)	25,693
Attributable to:						
Equity shareholders of Petropavlovsk PLC					(45,633)	26,883
Non-controlling interests					(3,249)	(1,190)
Earnings per share						
Basic (loss)/profit per share				11	US$(0.01)	US$0.01
Diluted (loss)/profit per share				11	US$(0.01)	US$0.01

Consolidated Statement of Comprehensive Income
For the year ended 31 December 2020

					2020 US$'000	2019 US$'000
(Loss)/profit for the year					(48,882)	25,693
Items that may be reclassified subsequently to profit or loss:						
Exchange differences:						
Exchange differences on translating foreign operations					(3,029)	2,102
Share of other comprehensive gain/(loss) of associate					902	(1,084)
Cash flow hedges:						
Fair value losses					-	(22,652)
Tax thereon					-	4,234
Transfer to revenue					-	31,471
Tax thereon					-	(5,865)
					(2,127)	8,206
Total comprehensive (loss)/profit for the year					(51,009)	33,899
Attributable to:						
Equity shareholders of Petropavlovsk PLC					(47,760)	35,067
Non-controlling interests					(3,249)	(1,168)
					(51,009)	33,899

Consolidated Statement of Financial Position
At 31 December 2020

	NOTE	31 DECEMBER 2020 US$'000	31 DECEMBER 2019 US$'000
Assets			
Non-current assets			
Exploration and evaluation assets	12	45,182	53,123
Property, plant and equipment	13	1,204,550	1,209,817
Investments in associate	14	3,936	48,680
Inventories	15	86,186	60,257
Trade and other receivables	16	481	556
Derivative financial instruments	18	-	11,022
Other non-current assets		893	880
		1,341,228	1,384,335
Current assets			
Inventories	15	196,668	307,773
Trade and other receivables	16	98,551	105,975
Current tax assets		13,312	5,807
Derivative financial instruments	18	3,320	-
Cash and cash equivalents	17	35,404	48,153
		347,255	467,708
Assets of disposal group classified as held for sale	14	42,529	-
		389,784	467,708
Total assets		1,731,012	1,852,043
Liabilities			
Current liabilities			
Trade and other payables	19	(191,139)	(389,041)
Current tax liabilities		(144)	(535)
Derivative financial instruments	18	(6,072)	(266)
Provision for close down and restoration costs	22	(34)	-
Lease liabilities	23	(1,895)	(5,373)
		(199,284)	(395,215)
Liabilities of disposal group associated with assets classified as held for sale	14	(8,232)	-
		(207,516)	(395,215)
Net current assets		182,268	72,493

Non-current liabilities			
Borrowings	20	(536,020)	(609,463)
Derivative financial instruments	18	(89,088)	(46,313)
Deferred tax liabilities	21	(140,034)	(112,566)
Provision for close down and restoration costs	22	(70,515)	(36,231)
Financial guarantee contract	26	-	(8,923)
Trade and other payables	19	(13,950)	-
Lease liabilities	23	(2,248)	(7,805)
		(851,855)	(821,301)
Total liabilities		(1,059,371)	(1,216,516)
Net assets		671,641	635,527
Equity			
Share capital	24	57,464	49,003
Share premium		596,713	518,142
Share based payments reserve		34	199
Translation reserve		(18,907)	(15,878)
Retained earnings		29,130	73,605
Equity attributable to the shareholders of Petropavlovsk PLC		664,434	625,071
Non-controlling interests		7,207	10,456
Total equity		671,641	635,527

These consolidated financial statements for Petropavlovsk PLC, registered number 4343841, were approved and authorised for issue by the directors on 16 May 2021 and signed on their behalf by James W. Cameron Jr., Non-Executive Chairman and Denis Alexandrov, Chief Executive Officer

Consolidated Statement of Changes in Equity
For the year ended 31 December 2020

	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 2019	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
Total comprehensive loss	-	-	-	-	(3,029)	(44,731)	(47,760)	(3,249)	(51,009)
Loss for the year	-	-	-	-	-	(45,633)	(45,633)	(3,249)	(48,882)
Other comprehensive (loss)/income	-	-	-	-	(3,029)	902	(2,127)	-	(2,127)
Conversion of convertible bonds	8,429	78,571	-	-	-	-	87,000	-	87,000
Deferred share awards	32	-	(165)	-	-	256	123	-	123
Balance at 31 December 2020	57,464	596,713	34	-	(18,907)	29,130	664,434	7,207	671,641

Consolidated Statement of Cash Flows
For the year ended 31 December 2020

	NOTE	2020 US$'000	2019 US$'000
Cash flows from operating activities			
Cash generated from operations	25	265,860	189,321
Interest paid		(58,086)	(67,160)
Guarantee fee received in connection with ICBC facility	26	5,000	6,000
Income tax paid		(56,472)	(32,723)
Net cash from operating activities		156,302	95,438
Cash flows from investing activities			
Purchase of property, plant and equipment	25	(151,503)	(120,798)
Expenditure on exploration and evaluation assets	12	(8,829)	(10,136)
Proceeds from disposal of property, plant and equipment		194	111
Repayment of loans granted	26	-	56,243
Other loans granted	26	-	(389)
Interest received		1,065	3,283
Call option over non-controlling interests	26	-	(13,000)
Net cash used in investing activities		(159,073)	(84,686)
Cash flows from financing activities			
Issue of Bonds, net of transaction cost	20	-	120,561
Repayment of Bonds	20	-	(108,000)
Exercise of the Call Option over the company's shares	18	-	(2,215)
Exercise of gold options	18	(1,525)	-
Exercise of currency options	18	1,389	-
Exercise of other options	18	(999)	-
Funds advanced to the Group under investment agreement with the Russian Ministry of Far East Development		-	8,772
Funds transferred under investment agreement with the Russian Ministry of Far East Development		-	(8,772)
Principal elements of lease payments		(3,493)	(1,468)
Bond solicitation expenses		(1,705)	-
Net cash (used in)/from financing activities		(6,333)	8,878
Net decrease in cash and cash equivalents in the period		(9,104)	19,630
Effect of exchange rates on cash and cash equivalents		(3,645)	2,371
Cash and cash equivalents at beginning of period	17	48,153	26,152

Cash and cash equivalents at end of period	17	35,404	48,153

Notes to the Consolidated Financial Statements
For the year ended 31 December 2020

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.

The financial information set out in this statement does not constitute statutory accounts as defined in section 435 of the Companies Act 2006. This set of financial results was approved by the board on 16 May 2021. The financial information for the years ended 31 December 2020 and 31 December 2019 has been extracted from the statutory accounts for each year.

The independent auditor's report on the 2020 statutory accounts was (i) unqualified, (ii) did not include references to any matters to which the auditor drew attention by way of emphasis without qualifying its reports and (iii) did not contain statements under section s498(2) or sS498(3) of the Companies Act 2006. The audited statutory accounts for the year ended 31 December 2019 have been delivered to the Registrar of Companies.

The Annual Report will be published on 28 May 2021.

The audited statutory accounts for the year ended 31 December 2020 will be delivered to the Registrar of Companies following the Company's annual meeting convened for 30 June 2021.

2. Significant accounting policies

2.1. Basis of preparation and presentation

The financial information in this announcement has been prepared using the recognition and measurement principles of 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 2020 Annual Report and Accounts. As at 31 December 2020, 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 May 2022. 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 3rd-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;
- Delayed commissioning of Pioneer flotation by six weeks in 2021 and of the Malomir third flotation line by three months in 2022 with relevant reduction of processing volumes; and
- Russian Rouble : US Dollar exchange rate that is approximately 10% stronger than the average of the market consensus forecasts.

In selecting these scenarios, the directors have also considered the potential impacts of COVID-19 which are described in detail in the Annual Report.

This layered stressed case indicates that mitigating actions will be required to be taken in order to ensure sufficient liquidity for the relevant period to May 2020. The mitigating actions include items within the control of the management, such as cost cutting, timing of capital expenditure and working capital management. In April 2021, the Group also secured RUB5 billion (an equivalent of approximately US$67 million) revolving credit facility with Gazprombank valid until May 2022 which will be used to cover liquidity needs as and when required.

As at 31 December 2020, the Group has guaranteed the outstanding amounts IRC owed to Gazprombank. The outstanding loan principal was US$203.9 million as at 31 December 2020 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 2020 Annual Report and Accounts. Accordingly, they continue to adopt the going concern basis of accounting in preparing these consolidated financial statements.

2.2. Adoption of new and revised standards and interpretations

The following new and revised Standards and Interpretations that were effective for annual periods beginning on or after 1 January 2020 and applicable to the Group have been adopted:

- Amendments to References to the Conceptual Framework in IFRS Standards (29 March 2018);
- Amendments to IFRS 3 (October 2018): Definition of Business; and
- Amendments to IAS 1 and IAS 8 (October 2018): Definition of Material.

These standards, amendments, and interpretations have not had a significant impact on amounts reported, presentation or disclosure in these consolidated financial statements and are not expected to significantly affect the future periods.

New standards and interpretations that are applicable to the Group, issued but not yet effective for the reporting period beginning 1 January 2020.

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):

- IFRS 17 Insurance Contracts;
- Amendments to IFRS 16: COVID-19-related Rent Concessions;
- Amendments to IAS 1: Classification of Liabilities as Current or Non-current;
- Amendments to IAS 16: Property, Plant and Equipment – Proceeds before intended use;
- Amendments to IFRS 3: Reference to the Conceptual Framework;
- Amendments to IAS 37: Onerous Contracts – Cost of Fulfilling a Contract;
- Annual Improvements to IFRS Standards 2018–2020 Cycle;
- Amendments to IFRS 10 and IAS 28: Sale or contribution of assets between an investor and its associate or joint venture.

The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

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 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 profit or loss and other comprehensive income 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.

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.

In the 2020 Annual Report operating profit is now presented from the perspective of Group operations excluding the results of the associate, IRC. This is more representative of how the business is viewed following the classification of IRC as held for sale and this change in classification also been applied to the comparative period.

2.6. Non-current assets (or disposal groups) held for sale

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of carrying amount and fair value less costs to sell.

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Group is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

2.7. 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 2020	AVERAGE YEAR ENDED 31 DECEMBER 2020	AS AT 31 DECEMBER 2019	AVERAGE YEAR ENDED 31 DECEMBER 2019
GB Pounds Sterling (GBP : US$)						0.73	0.78	0.75	0.78
Russian Rouble (RUB : US$)						73.88	72.18	61.91	64.69

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.

2.8. 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.

2.9. 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

The residual values and the useful lives of the assets are reviewed at least at each financial year end and, if expectations differ from previous estimates, the change(s) are accounted for as a change in an accounting estimate in accordance with IAS 8 ‘Accounting Policies, Changes in Accounting Estimates and Errors’.

2.10. 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 of disposal’. 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.

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.

2.11. 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.

2.12. 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 the amount of consideration, unless they contain significant financing components, when they are recognised at fair value, 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.

The Group have not designated any derivate financial instruments as hedge relationships in 2020 (2019: the Group had only cash flow hedges).

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.

2.13. 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.

2.14. 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 ore 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.

2.15. Leases

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.

2.16. 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.

2.17. 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 capital construction in progress until such time when the project is substantially ready for its intended use (which is when commercial production is ready to commence).

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.

2.18. 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.

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 and laws that are expected to apply in the period when the liability is settled or the asset is realised using tax rates and laws that have been enacted, or substantively enacted, at the reporting date. 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 makes judgements and estimates that can have a significant impact on the financial statements. These judgements and estimates are based on directors' 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 2020, 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.

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".
Continuous increase in iron ore price and increase in production output as reaching design capacity by K&S mine of IRC, combined with depreciation of the Russian Rouble against the US Dollar, had a positive effect on the value in use of the IRC investment during the year ended 31 December 2020. The Group reviewed the carrying value of its 31.1% investment in IRC and concluded that, based on value-in-use calculations, a US$21.4 million reversal of impairment was required and recorded accordingly (2019: a US$23.4 million impairment was required and recorded accordingly) (note 14).

On 18 March 2020, the Group signed 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.

Throughout 2020, the Group has continued to explore disposal options for the interest in IRC and further engaged with several parties to dispose of the equity holding and release the Group's obligation to guarantee IRC's external debt under the Gazprombank Facility (note 26). Following negotiations with several interested parties the directors resolved to approve the potential disposal of 29.9% investment in IRC. In the opinion of the directors it is highly probable this disposal to be completed within 12 months after the reporting date and accordingly 29.9% investment in IRC together with the financial guarantee contract were considered to be a disposal group held-for-sale under IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" as at 31 December 2020. The Group does not participate in the business conducted by IRC neither did it historically receive cash inflows from IRC operations in the form of dividends or other distributions. Furthermore the Group is not involved in the management of IRC and the investment in IRC is not considered to be part of core business of the Group. Management therefore do not consider IRC to be a separate major line of business, notwithstanding the value of the investment included in the Statement of financial position and the size of the share of results in IRC included in the Statement of Profit or Loss. Consequently, IRC is not recognised as a discontinued operation under IFRS 5 "Non-current Assets Held for Sale and Discontinued Operations".

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 review (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 2020 was recognised in the amount of 12-month ECL of US$8.2 million (2019: 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 Group’s 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, Malomir and Albyn 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 be presented within borrowings. As of 31 December 2020, the relevant contract liabilities amount to US$63.8 million (31 December 2019: US$187.4 million).

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 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 2020, this would give rise to an additional US$14.9 million deferred tax liability and corresponding increase to the tax charge for the year ended 31 December 2020. 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.

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. POX Hub facilities are allocated between Pioneer, Malomir and Albyn 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.

2020			PIONEER US$'000	MALOMIR US$'000	ALBYN US$'000	CORPORATE AND OTHER US$'000	CONSOLIDATED US$'000
Revenue							
Gold			486,207	247,921	221,244	-	955,372
Silver			338	100	196	-	634
Other external revenue			-	-	-	32,528	32,528
Inter segment revenue			32,694	380	23,104	143,425	199,603
Intra group eliminations			(32,694)	(380)	(23,104)	(143,425)	(199,603)
Total Group revenue from external customers			486,545	248,021	221,440	32,528	988,534
Operating expenses and income							
Operating cash costs			(366,677)	(106,959)	(92,307)	(35,497)	(601,440)
Depreciation			(49,824)	(53,771)	(27,969)	(2,515)	(134,079)
Central administration expenses			-	-	-	(61,371)	(61,371)
Impairment of mining assets			-	-	(58,806)	-	(58,806)
Impairment of exploration and evaluation assets			-	-	(16,112)	-	(16,112)
Impairment of gold in circuit			(77)	-	-	-	(77)
Impairment of bullion in process			(41)	-	-	-	(41)
Write-down of inventories to net realisable value			-	-	-	(1,215)	(1,215)
Total operating expenses [(a)]			(416,619)	(160,730)	(195,194)	(100,598)	(873,141)
Segment result			69,926	87,291	26,246	(68,070)	115,393
Foreign exchange gains							32,647
Operating profit							148,040
Share of results of associate							52,681
Write-down to adjust the carrying value of net assets of disposal group to fair value less costs to sell							(55,798)
Net impairment reversals on financial instruments							1,000
Investment and other finance income							7,754
Interest expense							(58,533)
Net other finance losses							(67,957)
Taxation							(76,069)
Loss for the year							(48,882)
Segment assets			619,004	603,684	312,678	149,698	1,685,064
Segment liabilities			(109,478)	(70,650)	(28,169)	(166,788)	(375,085)

Deferred tax – net							(140,034)
Unallocated cash							3,419
Borrowings							(536,020)
Net assets of disposal group classified as held for sale							34,297
Net assets							671,641
Other segment information							
Additions to non-current assets:							
Exploration and evaluation expenditure			-	799	5,707	2,310	8,816
Capital Expenditure			54,926	19,905	40,518	3,191	118,540
Capitalised Stripping			20,992	23,836	-	-	44,828
Other items capitalised [(b)]			20,838	9,113	7,726	-	37,677
Average number of employees			2,816	1,280	1,421	3,372	8,889

(a) Operating expenses excluding foreign exchange gains (note 6).
(b) Interest and close down and restoration costs capitalised (note 13).

2019			PIONEER US$'000	MALOMIR US$'000	ALBYN US$'000	CORPORATE AND OTHER US$'000	CONSOLIDATED US$'000
Revenue							
Gold [c]			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 [d]			(169,382)	(182,736)	(124,202)	(93,725)	(570,045)
Segment result			54,275	56,896	105,083	(44,710)	171,544
Foreign exchange losses							(20,808)
Operating profit							150,736
Share of results of associate							(35,376)
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 [(e)]			19,058	6,087	1,435	-	26,580
Average number of employees			2,910	1,284	1,442	3,345	8,981

(c) Net of US$(31.5) million net of cash settlement paid by the Group for realised cash flow hedges.
(d) Operating expenses excluding foreign exchange losses (note 6).
(e) Interest and close down and restoration costs capitalised (note 13).

Entity wide disclosures

Revenue by geographical location [(a)]

						2020 US$'000	2019 US$'000
Russia and CIS						714,263	678,348
United Kingdom of Great Britain and Northern Ireland						208,166	44,975
Switzerland						66,059	17,898
Other						46	368
						988,534	741,589

(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)]

						2020 US$'000	2019 US$'000
Russia						1,339,675	1,371,358
Other						878	1,113
						1,340,553	1,372,471

(b) Excluding financial instruments and deferred tax assets.

Information about major customers

During the years ended 31 December 2020 and 31 December 2019 the Group generated revenues from the sales of gold to banks. Included in gold sales revenue for the year ended 31 December 2020 are revenues of US$955 million which arose from sales of gold to three bank groups that individually accounted for more than 10% of the Group's revenue, namely US$612 million to Gazprombank and US$135 million to Sberbank group, and US$208 million to ICBC (2019: 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). 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

						2020 US$'000	2019 US$'000
Sales of goods:							
Gold						955,372	691,697
Silver						634	877
Other goods						19,664	33,395
Rendering of services:							
Engineering and construction contracts						10,390	12,535
Other services						1,897	2,347
Rental income						577	738
						988,534	741,589
						2020 US$'000	2019 US$'000
Timing of revenue recognition:							
At a point in time						975,670	725,969
Over time						12,864	15,620
						988,534	741,589

For assets and liabilities related to contracts with customers, including revenue recognised in the period that was included in the contract liability balance at the beginning of the period, please refer to notes 16 and 19.

6. Operating expenses and income

	2020 US$'000	2019 US$'000
Net operating expenses [(a)]	735,519	572,313
Impairment/(reversal of impairment) of mining assets and in-house service [(a)]	58,806	(52,159)
Impairment of exploration and evaluation assets [(a)]	16,112	-
Write-down of inventory to net realisable value	1,215	-
Reversal of impairment of ore stockpiles [(a)]	-	(2,778)
Impairment of gold in circuit	77	142
Impairment of bullion in process	41	-
Central administration expenses [(a)]	61,371	52,527
Foreign exchange (gains)/losses	(32,647)	20,808
	840,494	590,853

(a) As set out below.

Net operating expenses

	2020 US$'000	2019 US$'000
Depreciation	134,079	137,775
Staff costs	88,492	97,615
Materials	88,623	91,004
Flotation concentrate purchased	201,647	74,010
Fuel	29,565	43,612
External services	43,095	46,392
Mining tax charge	33,796	15,917
Electricity	33,880	34,118
Smelting and transportation costs	777	858
Movement in ore stockpiles, work in progress, bullion in process, limestone and flotation concentrate attributable to gold production	29,962	(34,156)
Taxes other than income	7,962	7,706
Insurance	3,641	8,437
Rental fee	2,861	3,194
Provision for impairment of trade and other receivables	650	2,021
Bank charges	1,088	876
Repair and maintenance	5,061	6,896
Security services	4,424	4,503
Travel expenses	1,284	2,902

Goods for resale	11,068	19,471
Other operating expenses	13,564	9,162
	735,519	572,313

Central administration expenses

						2020 US$'000	2019 US$'000
Staff costs						29,926	33,466
Professional fees						20,615	1,771
Insurance						739	797
Rental fee						416	481
Business travel expenses						541	2,000
Office costs						830	832
Other						8,304	13,180
						61,371	52,527

Impairment charges

Impairment of mining assets

The Group undertook a review of impairment 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 in relation to Pioneer and Malomir CGUs and indicated an impairment in relation to Albyn CGU as at 31 December 2020.

The directors concluded to record a pre-tax impairment of an aggregate of US$74.9 million (being a post-tax impairment of an aggregate of US$59.9 million) to the extent that recoverable amounts no longer supported the relevant carrying values of assets that are part of Albyn CGU on the statement of financial position as at 31 December 2020 as set out below:

— A pre-tax impairment of US$58.8 million (being a post-tax impairment of US$47.0 million) has been recorded against the associated assets within property, plant and equipment; and

— A pre-tax impairment of US$16.1 million (being a post-tax impairment of US$12.9 million) has been recorded against the associated exploration and evaluation assets.

As at 31 December 2019, the Group recognised US$43.5 million (US$34.8 million post-tax) reversal of impairment previously recorded against the carrying value of the assets of the Pioneer CGU and US$9.4 million (US$7.8 million post-tax) reversal of impairment previously recorded against the carrying value of the assets of the supporting in-house service companies. The aforementioned impairment reversals took into consideration the effect of depreciation attributable to relevant assets and intra-group transfers of previously impaired assets.

Impairment of exploration and evaluation assets

The Group performed a review of its exploration and evaluation assets and concluded no impairment except for in relation to assets that are part of Albyn CGU was required as at 31 December 2020 (31

December 2019: The Group performed a review of its exploration and evaluation assets and concluded no impairment was required).

As at 31 December 2020 and 31 December 2019, exploration and evaluation assets in the statement of financial position primarily related to the areas adjacent to the existing mines (note 12).

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 2020	YEAR ENDED 31 DECEMBER 2019
Long-term real gold price [(a)]	US$1,575/oz	US$1,400/oz
Discount rate [(b)]	6.4%	7.0%
RUB : US$ exchange rate [(c)]	RUB73.6 : US$1	RUB65.8 : US$1

(a) Being upper 75% range of the analyst forecasts based on Consensus Economics, published in December 2019 and January 2021. Based on experience of analyst forecasts being on a conservative side, it is management's view that the upper 75% range is a more accurate basis on which to base the forecasting of forecasting future cash flows for value-in-use calculations.
(b) Being the post-tax real weighted average cost of capital, an equivalent to a nominal pre-tax discount rate of 8.7% (2019: 9.8%), applied to cash flows prepared on a consistent post-tax real basis.
(c) Based on Consensus Economics, published in December 2019 and January 2021.

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
Long-term real gold price [(a)]	US$1,420/oz	US$212 million
Discount rate [(b)]	7.4%	US$18 million
RUB : US$ exchange rate [(a)]	RUB66.0 : US$1	US$113 million

(a) In relation to Pioneer and Albyn CGUs.
(b) In relation to Albyn CGU.

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 2020			YEAR ENDED 31 DECEMBER 2019		
	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
Albyn	-	-	-	(3,959)	673	(3,286)
	-	-	-	(2,778)	452	(2,326)

7. Auditor's remuneration

The Group, including its overseas subsidiaries, obtained the following services from the company's auditor and their associate:

		2020 US$'000	2019 US$'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		1,750	1,021
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		650	351
For the audit of subsidiary statutory accounts pursuant to legislation [a]		122	84
Fees payable to the previous auditor for work carried out in the previous year for the annual audit of the parent company and consolidated financial statements		486	-
		3,008	1,456
Non-audit fees			
Other services pursuant to legislation – interim review		400	337
Fees for reporting accountants services [b]		-	400
		400	737

(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 process (notes 26).

8. Staff costs

						2020 US$'000	2019 US$'000
Wages and salaries						93,099	103,728
Social security costs						25,065	26,952
Pension costs						131	121
Share-based compensation						123	280
						118,418	131,081
Average number of employees						8,889	8,981

9. Financial income and expenses and impairment of financial instruments

				2020 US$'000	2019 US$'000
Net impairment reversals on financial instruments					
Reversal of impairment of financial assets				309	2,333 [a]
Financial guarantee contract				691	28,464 [b]

				1,000	30,797
Investment and other finance income					
Interest income				1,100	3,216
Guarantee fee income [(c)]				6,654	5,610
				7,754	8,826
Interest expense					
Notes				(42,238)	(41,995)
Convertible bonds				(9,231)	(12,984)
Prepayment on gold sale agreements				(9,938)	(16,019)
Lease liabilities				(485)	(593)
				(61,892)	(71,591)
Interest capitalised				4,134	12,287
Unwinding of discount on environmental obligation				(775)	(550)
				(58,533)	(59,854)
Net other finance (losses)/gains					
Fair value loss on the conversion option [(d)]				(42,775)	(31,127)
Loss on repurchase of the Existing Bonds [(e)]				-	(11,211)
Loss on Bonds conversion [(f)]				(9,536)	-
Fair value gain on the guarantee receivable [(g)]				571	3,607
Fair value loss on the call option over non-controlling interests [(h)]				(11,022)	(1,978)
Fair value loss on other derivative financial instruments				(733)	(1,345)
Fair value loss on listed equity investments				(92)	(302)
Gain on lease modification				224	166
Fair value loss on gold option contracts [(i)]				(7,021)	-
Fair value gain on currency option contracts [(i)]				4,132	-
Bond solicitation expenses				(1,705)	-
				(67,957)	(42,190)

(a) 2019: US$3.2 million reversal 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. 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 conversion option to fair value (notes 18 and 20).

(e) 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).
(f) Result of Bonds being converted and settled in shares at their nominal value and the carrying value of Convertible Bonds.
(g) Result of re-measurement of receivable from IRC under ICBC Guarantee arrangements to fair value (2019: result of re-measurement of receivable from IRC under ICBC guarantee arrangements to fair value, including US$0.7 million guarantee fee income) (note 26).
(h) Result of re-measurement of the TEMI option to fair value (notes 18 and 26).
(i) Result of measurement of gold and currency option contracts (note 18).

10. Taxation

						2020 US$'000	2019 US$'000
Current tax							
Russian current tax						48,652	29,660
						48,652	29,660
Deferred tax							
Origination/(reversal) of temporary differences [a]						27,417	(2,414)
Total tax charge [b]						76,069	27,246

(a) Including effect of foreign exchange movements in respect of deductible temporary differences of US$33.1 million (year ended 31 December 2019: US$(20.4) 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.

		2020 US$'000	2019 US$'000
(Loss)/profit before tax		27,187	52,939
Less: share of results of associate		(52,681)	35,376
(Loss)/profit before tax (excluding associate)		(25,494)	88,315
Tax on profit (excluding associate) at the Russian corporation tax rate of 20% (2019: 20%)		(5,099)	17,663
Effect of the reduced corporation tax rate		23	(4,813) [a]
Effect of different tax rates of subsidiaries operating in other jurisdictions		1,207	1,239
Tax effect of expenses that are not deductible for tax purposes [b]		23,382	7,681
Tax effect of tax losses for which no deferred income tax asset was recognised [c]		15,460	11,967
Utilisation of previously unrecognised tax losses		(2)	(124)
Foreign exchange movements in respect of deductible temporary differences [d]		33,064	(20,424)
Other adjustments [e]		8,034	14,057
Tax charge		76,069	27,246

(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 LLC Malomirskiy Rudnik and LLC Albynskiy Rudnik have 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) and write-down to adjust the carrying value of net assets of the disposal group to fair value less costs to sell (note 14).
(c) Primarily relate to interest expense incurred in the UK and loss on repurchase of the Existing Bonds (note 9) (2019: primarily relate to interest expense incurred in the UK and loss on repurchase of the Existing Bonds).
(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) 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$7.5 million (2019: US$10.5 million) of contingent liabilities, including US$0.2 million (2019:US$4.8 million) in respect of income tax and US$7.3 million (2019: US$5.7 million) in respect of other taxes.

11. Earnings per share

	2020 US$'000	2019 US$'000
(Loss)/profit for the year attributable to equity holders of Petropavlovsk PLC	(45,633)	26,883
Interest expense on convertible bonds [(a)]	-	-
(Loss)/profit used to determine diluted earnings per share	(45,633)	26,883
	NO OF SHARES	NO OF SHARES
Weighted average number of Ordinary Shares	3,564,250,949	3,309,193,559
Adjustments for dilutive potential Ordinary Shares [(a)]	-	-
Weighted average number of Ordinary Shares for diluted earnings per share	3,564,250,949	3,309,193,559
	US$	US$
Basic (loss)/profit per share	(0.01)	0.01
Diluted (loss)/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 2020 and 31 December 2019.

12. Exploration and Evaluation Assets

	FLANKS OF PIONEER US$'000	FLANKS OF ALBYN US$'000	OTHER US$'000	TOTAL US$'000
At 1 January 2020	7,544	43,397	2,182	53,123
Additions	-	5,707	3,109	8,816
Reallocation and other transfers	-	(645)	-	(645)
Impairment [(note 6)]	-	(16,112)	-	(16,112)
At 31 December 2020	7,544	32,347	5,291	45,182

				FLANKS OF PIONEER US$'000	FLANKS OF ALBYN US$'000	OTHER 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

13. Property, Plant and Equipment

		MINING ASSETS [d] US$'000	NON-MINING ASSETS [d] US$'000	CAPITAL CONSTRUCTION IN PROGRESS US$'000	TOTAL US$'000
Cost					
At 1 January 2019		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 [h]		2,509,276	194,515	40,739	2,744,530
Additions [a]		78,060	4,654	80,654	163,368
Interest capitalised [b]		-	-	4,134	4,134
Close down and restoration cost capitalised [note 22]		33,543	-	-	33,543
Transfers from capital construction in progress [c]		26,190	1,165	(27,355)	-
Disposals [e]		(33,890)	(12,653)	(152)	(46,695)
Reallocation and other transfers		39	(39)	645	645
Foreign exchange differences		-	(4,167)	(88)	(4,255)
At 31 December 2020 [h]		2,613,218	183,475	98,577	2,895,270
Accumulated depreciation and impairment					
At 1 January 2019		1,337,785	133,621	1,508	1,472,914
Charge for the year [f]		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 (h)		1,405,097	129,616	-	1,534,713
Charge for the year (f)		133,655	4,242	-	137,897
Disposals		(32,610)	(4,936)	-	(37,546)
Reallocation and other transfers		(4,437)	4,437	-	-
Impairment (note 6)		58,806	-	-	58,806
Foreign exchange differences		-	(3,150)	-	(3,150)
At 31 December 2020 (h)		1,560,511	130,209	-	1,690,720
Net book value					
At 31 December 2019 (g)		1,104,179	64,899	40,739	1,209,817
At 31 December 2020 (g)		1,052,707	53,266	98,577	1,204,550

(a) Including US$44.8 million stripping cost capitalised (2019: US$27.1 million).
(b) Borrowing costs were capitalised at the weighted average rate of the Group's relevant borrowings being 9.0% (2019: 9.1%).
(c) Being costs primarily associated with the Elginskoye and POX hub projects (2019: Being costs primarily associated with the POX hub project and the Malomir flotation plant).
(d) Mining and Non-mining assets include of right-of-use assets. For the movement in the right-of-use assets during the period see note 23.
(e) Including US$19.5 million of fully depreciated fleet that is not suitable for future use due to wear and tear, US$11.7 million disposals of mining fleet due to derecognition of the replaced part (31 December 2019: 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).
(f) Including US$30.3 million depreciation charge of capitalized stripping cost (2019: US$32.2 million).
(g) Including US$56.4 million net book value of capitalized stripping cost (31 December 2019: US$41.9 million).
(h) Including US$498.0 million of fully depreciated property, plant and equipment (31 December 2019: US$485.2 million).

14. Investment in associate and disposal group held for sale

						2020 US$'000	2019 US$'000
IRC Limited ('IRC') (a)						3,936	48,680
						3,936	48,680

(a) 1.2% interest in IRC, with 29.9% interest in IRC re-classified as assets held for sale as set out below (31 December 2019: 31.1%).

Summarised financial information for IRC and its subsidiaries is set out below.

						IRC 2020 US$'000	IRC 2019 US$'000
Non-current assets							
Exploration and evaluation assets						20,165	19,877
Property, plant and equipment						573,041	522,640
Other non-current assets						14,481	14,859

						607,687	557,376
Current assets							
Cash and cash equivalents						20,371	4,292
Other current assets						53,063	46,106
						73,434	50,398
Current liabilities							
Borrowings [(a)]						(20,082)	(20,703)
Other current liabilities						(77,898)	(80,288)
						(97,980)	(100,991)
Non-current liabilities							
Borrowings [(a)]						(181,998)	(201,204)
Other non-current liabilities						(18,857)	(27,578)
						(200,855)	(228,782)
Net assets						382,286	278,001

(a) 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 2020 and 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$52.3 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.

						IRC YEAR ENDED 31 DECEMBER 2020 US$'000	IRC YEAR ENDED 31 DECEMBER 2019 US$'000
Revenue						224,591	177,164
Net operating expenses						(97,366)	(178,653)
Including:							
Depreciation						(28,818)	(28,504)
Impairment losses under expected credit loss model						(7,115)	-
Reversal of impairment of mining assets						75,832	-
Foreign exchange gains/(losses)						6,934	(6,181)
Investment income						44	83
Interest expense						(25,157)	(40,421)
Taxation						(1,602)	3,157

Profit/(loss) for the year						100,510	(38,670)
Other comprehensive profit/(loss)						2,902	(3,483)
Total comprehensive profit/(loss)						103,412	(42,153)
Group's share %						31.1%	31.1%
Group's share in profit/(loss) for the year						31,257	(12,026)
Reversal of impairment/(impairment) of investment in associate						21,424	(23,350)
Share of results of associate						52,681	(35,376)

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 US$21.4 million reversal impairment was required and recorded accordingly (31 December 2019: US$23.4 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 2020 were real long-term selling price for 65% iron ore concentrate of US$77.5 per dry metric tonne and discount rate, being the post-tax real weighted average cost of capital, of 9.7%.

Following negotiations with several interested parties the directors resolved to approve the potential disposal of 29.9% investment in IRC (note 3.1). This disposal is expected to be completed within 12 months after the reporting date and accordingly investment in IRC has been classified as "held for sale" and presented separately in the statement of financial position as at 31 December 2020.

The following assets and liabilities were re-classified as held for sale as at 31 December 2020.

						CARRYING AMOUNT US$'000	FAIR VALUE LESS COSTS TO SELL [(a)] US$'000
Investment in associate [(b)]						98,327	42,529
Total assets of disposal group classified as held for sale						98,327	42,529
Financial guarantee contract						(8,232)	(8,232)
Total liabilities of disposal group associated with assets classified as held for sale						(8,232)	(8,232)
Net assets of disposal group classified as held for sale						90,095	34,297
Write-down to adjust the carrying value of net assets of disposal group to fair value less costs to sell							(55,798)

(a) Based on market share price of HK$0.14 per IRC share as at 31 December 2020, less estimated transaction costs, and fair value of Gazprombank Guarantee of US$nil.
A decrease/ increase of 10% in IRC's share price would result in US$3.8 million additional write-down/ reversal of write-down adjustment.
(b) 29.9% interest in IRC Limited

15. Inventories

						YEAR ENDED 31 DECEMBER 2020 US$'000	YEAR ENDED 31 DECEMBER 2019 US$'000
Current							

Construction materials	9,060	6,600
Stores and spares	84,309	86,985
Ore in stockpiles [(a)]	29,901	68,479
Gold in circuit [(a)]	26,567	37,740
Bullion in process [(a)]	9,284	4,732
Flotation concentrate	32,801	97,932
Other	4,746	5,305
	196,668	307,773
Non-current		
Ore in stockpiles [(a), (b)]	75,605	60,257
Other [(c)]	10,581	-
	86,186	60,257

(a) As at 31 December 2020, there were no balances of ore in stockpiles carried at net realisable value (31 December 2019: US$0.1 million) and there were US$3.4 million of gold in circuit (31 December 2019: US$1.4 million) and US$0.2 million of bullion in process (31 December 2019: US$nil) carried at net realisable value (note 6).
(b) Ore in stockpiles that is not planned to be processed within twelve months after the reporting period.
(c) As at 31 December 2020 there were US$10.6 million goods for resale at Irgiredmet planned to be realised more than one year after the reporting period.

16. Trade and other receivables

	2020 US$'000	2019 US$'000
Current		
VAT recoverable	37,959	51,499
Advances to suppliers	17,800	10,513
Prepayments for property, plant and equipment	5,753	9,216
Trade receivables [(a)]	8,547	10,254
Contract assets	827	2,856
Guarantee fee receivable [(b)]	11,926	9,417
Other debtors [(c)]	15,739	12,220
	98,551	105,975
Non-current		
Other [(d)]	481	556
	481	556

(a) Net of provision for impairment of US$1.1 million (2019: US$1.2 million). Trade receivables are generally due for settlement between three and twelve months.
(b) Please refer to 14 and 26 for the details of ICBC and Gazprombank guarantee arrangements.
(c) Net of provision for impairment of US$2.2 million (2019: US$1.7 million).
(d) Net of provision for impairment of US$0.1 million (2019: US$nil).

The directors consider that the carrying amount of trade and other receivables approximates their fair value.

17. Cash and cash equivalents

	2020 US$'000	2019 US$'000
Cash at bank and in hand	7,862	14,181
Short-term bank deposits	27,542	33,972 [(a)]
	35,404	48,153

(a) Including US$1.1 million of restricted bank deposit as at 31 December 2019.

18. Derivative financial instruments

	31 DECEMBER 2020		31 DECEMBER 2019	
	ASSETS US$'000	LIABILITIES US$'000	ASSETS US$'000	LIABILITIES US$'000
Current				
Gold option contracts [(a), (c)]	172	(5,668)	-	-
Currency option contracts [(b), (c)]	3,148	(404)	-	-
Other	-	-	-	(266)
	3,320	(6,072)		(266)
Non-current				
Conversion option [(d), (e)]	-	(89,088)	-	(46,313)
Call option over non-controlling interests [(f), (g)]	-	-	11,022	-
	-	(89,088)	11,022	(46,313)

(a) Gold option contracts with an exercise price of US$1,600/oz for purchased put options and US$1,832/oz for issued call options for an aggregate of 42,000 ounces of gold maturing over a period until December 2021.
(b) Currency option contracts with an exercise price of RUB75.00 for purchased put options and in the range between RUB90.65 and RUB100.00 for issued call options for an aggregate of US$84 million maturing over a period until December 2021.
(c) Measured at fair value and considered as Level 2 of the fair value hierarchy which valuation incorporates the following inputs:
- Historic gold price / RUB: USD exchange rates volatility;
- Exercise price;
- Time to maturity; and
- Risk free rate.
(d) Note 20.
(e) 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;
- The conversion price;
- Time to maturity; and
- Risk free rate.
(f) 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 Agestinia 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.
(g) 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.

19. Trade and other payables

	2020 US$'000	2019 US$'000
Current		
Trade payables (a)	48,604	134,818
Payables for property, plant and equipment	9,244	5,810
Contract liabilities - advances from customers under gold sales agreements (b)	63,787	187,433
Other contract liabilities (c)	7,371	9,233
Accruals and other payables	62,133	51,747
	191,139	389,041
Non-current		
Other contract liabilities (c)	13,288	-
Accruals and other payables	662	-
	13,950	-

(a) The trade payables as at 31 December 2020 include US$23.1 million payable for flotation concentrate purchased (31 December 2019: US$81.0 million).
(b) Include US$63.8 million (31 December 2019: US$152.5 million) Russian Rouble denominated and US$nil million (31 December 2019: US$34.9 million) US Dollar denominated 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. Contractual interest charged on the advances received as at 31 December 2020 is in the range 8.0 - 8.32% and is payable monthly (31 December 2019: in the range of 10.0-10.32% for Russian Rouble denominated advances and in the range 7.43% - 7.45% for US Dollar denominated advances, payable monthly). The table below sets out reconciliation of opening and closing balances, including revenue recognised in the period (note 5) that was included in the contract liability balance at the beginning of the period.

	2020 US$'000	*2019 US$'000*
At 1 January	*187,433*	*163,820*
New contract liabilities	*71,222*	*192,663*
Revenue recognised in the period that was included in the contract liability balance at the beginning of the period	*(163,043)*	*(143,974)*
Revenue recognised in the period against new contract liabilities	*(7,107)*	*(44,367)*
Interest accrued (note 9)	*9,938*	*16,019*
Interest paid (note 9)	*(9,938)*	*(16,019)*
Foreign exchange difference	*(24,718)*	*19,291*
At 31 December	*63,787*	*187,433*

(c) Being primarily advances received under re-sale contracts in connection with services performed by the Group's subsidiary, Irgiredmet, in its activity to procure materials such as reagents, consumables and equipment for third parties. Revenue recognised in the period (note 5) that was included in the contract liability balance at the beginning of the period amounted to US$1.3 million (2019: US$1.6 million).

The directors consider that the carrying amount of trade and other payables approximates to their fair value.

20. Borrowings

	2020 US$'000	2019 US$'000
Borrowings at amortised cost		

Notes [a]						501,990	500,377
Convertible bonds [b]						34,030	109,086
						536,020	609,463
Amount due for settlement after 12 months						536,020	609,463
						536,020	609,463

(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) Debt component of the US$125 million Convertible Bonds due on 03 July 2024 measured at amortised cost and not revalued. As at 31 December 2020, the outstanding principal amount of the Convertible Bonds was US$38 million (31 December 2019: US$125 million). 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).

During the year ended 31 December 2020, the company has received Conversion Notices in respect of the exercise of conversion rights under the US$125 million Convertible Bonds. The principal amount of the Convertible Bonds in respect of which the Conversion Notices have been served amounted to an aggregate of US$87 million, which, at a fixed exchange price of US$0.1350 per ordinary share, resulted in the issue and allotment of an aggregate of 644,444,432 new ordinary shares.

The conversion option of the 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 2020, the fair value of debt component of the convertible bonds, considered as Level 3 of the fair value hierarchy, amounted to US$36.8million (31 December 2019: US$122.8 million), with the carrying value of US$34.0 million (31 December 2019: 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 2020, 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$125.9 million (31 December 2019: US$169.1 million).

21. Deferred taxation

						2020 US$'000	**2019 US$'000**
At 1 January						112,566	113,354
Deferred tax charged/(credited) to profit or loss [a]						27,417	(2,414)
Deferred tax charged to equity						-	1,631
Exchange differences						51	(5)
At 31 December						140,034	112,566

Deferred tax liabilities						(140,034)	(112,566)
Net deferred tax liability						(140,034)	(112,566)

(a) Note 10.

			AT 1 JANUARY 2020 US$'000	CHARGED/(CREDITED) TO PROFIT OR LOSS US$'000	CHARGED DIRECTLY TO EQUITY US$'000	EXCHANGE DIFFERENCES US$'000	AT 31 DECEMBER 2020 US$'000
Property, plant and equipment			130,877	8,937	-	(76)	139,738
Inventory			8,391	3,551	-	59	12,001
Exploration and evaluation assets			8,026	96	-	-	8,122
Other temporary differences			(1,358)	(4,360)	-	68	(5,650)
Tax losses carried forward [b]			(33,370)	19,193	-	-	(14,177)
			112,566	27,417	-	51	140,034

(b) 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 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 [c]			(23,615)	(9,755)	-	-	(33,370)
			113,354	(2,414)	1,631	(5)	112,566

(c) 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.

As at 31 December 2020, the Group did not recognise deferred tax assets in respect of the accumulated unused tax losses comprising US$850.5 million (2019: US$718.8 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$540.3 million (2019: US$535.4 million) and corporate interest restriction disallowances of US$287.5 million (2019: US$155.6 million) arise in the UK and tax losses of US$21.8 million (2019: US$26.7 million) arise in Russia, both can be carried forward indefinitely.

As at 31 December 2020, the Group did not recognise deferred tax assets of US$10.6 million (2019: US$7.8 million) in respect of deductible temporary differences arising primarily 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 2020, statutory unremitted earnings comprised in aggregate US$946.8 million (2019: US$960.1 million).

22. Provision for close down and restoration costs

	2020 US$'000	2019 US$'000
At 1 January	36,231	21,388
Unwinding of discount	775	550
Change in estimates [(a)]	33,543	14,293
Amounts charged against provision	-	-
At 31 December	70,549	36,231
Amount due for settlement within 12 months	34	-
Amount due for settlement after 12 months	70,515	36,231
	70,549	36,231

(a) Primarily reflects updated cost estimates for acid mine water drainage treatment and unit costs (2019: primarily reflects the effect of change in the forecast 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:

	2020 US$'000	2019 US$'000
POX Hub	13,717	7,401
Pioneer	29,192	12,864
Malomir	16,955	10,630
Albyn	10,685	5,336
	70,549	36,231

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 2022 and 2055 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 years ended 31 December 2020 and 31 December 2019 was as follows:

	2020 US$'000	2019 US$'000
At 1 January	13,178	1,739
Additions	3,410	13,279

Interest expense						485	593
Payment of lease liabilities, including interest expense						(4,153)	(1,879)
Disposals						(7,755)	(1,124)
Foreign exchange differences						(1,022)	570
At 31 December						4,143	13,178
Amount due for settlement within 12 months						1,895	5,373
Amount due for settlement after 12 months						2,248	7,805
						4,143	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.

The movement in the right-of-use asset during the years ended 31 December 2020 and 31 December 2019 was as follows:

						2020 US$'000	2019 US$'000
At 1 January						11,725	1,818
Additions						3,410	13,279
Disposals						(7,531)	(958)
Depreciation						(3,423)	(2,423)
Translation difference						(23)	9
At 31 December						4,158	11,725

The statement of profit or loss shows the following amounts relating to leases where the Group is a lessee:

						2020 US$'000	2019 US$'000
Depreciation charge of right-of-use assets						3,423	2,423
Interest expense						485	593
Expense relating to short-term leases						1,576	2,169
Expense relating to leases of low-value that are not shown above as short-term leases						62	49

24. Share capital

	2020		2019	
	NO OF SHARES	US$'000	NO OF SHARES	US$'000
Allotted, called up and fully paid				

At 1 January	3,310,210,281	49,003	3,307,151,712	48,963
Issued during the period	647,059,973	8,461	3,058,569	40
At 31 December	3,957,270,254	57,464	3,310,210,281	49,003

25. Notes to the statement of cash flows

Reconciliation of profit before tax to operating cash flow

	2020 US$'000	2019 US$'000
(Loss)/profit before tax	27,187	52,939
Adjustments for:		
Share of results of associate	(52,681)	35,376
Net impairment reversals on financial instruments	(1,000)	(30,797)
Investment and other finance income	(7,754)	(8,826)
Interest expense	58,533	59,854
Net other finance losses	67,957	42,190
Share based payments	123	280
Depreciation	134,079	137,775
Impairment/(reversal of impairment) of mining assets and in-house service	58,806	(52,159)
Impairment of exploration and evaluation assets	16,112	-
Write-down of inventory to net realisable value	1,215	-
Reversal of impairment of ore stockpiles	-	(2,778)
Effect of processing previously impaired stockpiles	(517)	(6,398)
Impairment of gold in circuit	77	142
Effect of processing previously impaired gold in circuit	(244)	(1,413)
Impairment of bullion in process	41	-
Provision for impairment of trade and other receivables	1,339	2,280
Loss on disposals of property, plant and equipment	1,451	1,118
Write-down to adjust the carrying value of net assets of disposal group to fair value less costs to sell	55,798	-
Foreign exchange (gains)/losses	(32,647)	20,808
Other non-cash items	645	129
Changes in working capital:		
Increase in trade and other receivables	(5,149)	(31,204)
Decrease/(increase) in inventories	85,512	(133,848)
(Decrease)/Increase in trade and other payables	(143,023)	103,853
Net cash generated from operations	265,860	189,321

Reconciliation of cash flows used to purchase property, plant and equipment

	2020 US$'000	2019 US$'000
Additions to property, plant and equipment	163,368	125,524
Non-cash additions to property, plant and equipment:		
Transfer from materials	2,120	7,343
Capitalised depreciation	(3,818)	(737)
Right-of-use assets additions	(3,410)	(13,279)
	158,260	118,851
Associated cash flows:		
Purchase of property, plant and equipment	151,503	120,798
Decrease/(increase) in prepayments for property, plant and equipment	3,480	(1,982)
Increase in payables for property, plant and equipment	3,434	568
Cash movements presented in other cash flow lines:		
Changes in working capital	(157)	(533)
	158,260	118,851

Non-cash transactions

An equivalent of US$0.1 million of VAT recoverable was offset against profit tax during the year ended 31 December 2020 (year ended 31 December 2019 : US$0.1 million) and US$1 million of provision of profit tax relating to Albyn, was accrued as at 31 December 2020 (31 December 2019: US$1.5 million). There were no other significant non-cash transactions during the years ended 31 December 2020 and 2019.

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 2020 and 2019 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	
	2020 US$'000	2019 US$'000	2020 US$'000	2019 US$'000
Close family members of key management personnel	-	-	256	4,046 [(a)]
IRC Limited and its subsidiaries	85	42	111	5,458 [(b)]
	85	42	367	9,504

(a) 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.
(b) 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).

During the year ended 31 December 2020, the Group made US$0.3 million charitable donations to the Petropavlovsk Foundation (2019: US$1.0 million).

The outstanding balances with related parties at 31 December 2020 and 2019 are set out below.

	AMOUNTS OWED BY RELATED PARTIES		AMOUNTS OWED TO RELATED PARTIES	
	2020 US$'000	2019 US$'000	2020 US$'000	2019 US$'000
Close family members of key management personnel	-	-	-	759
IRC Limited and its subsidiaries	3,604	3,651	1,100	5,863
	3,604	3,651	1,100	6,622

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'). As at 31 December 2020 the remaining outstanding contractual guarantee fee was US$0.01 million, which had a corresponding fair value of US$0.01 million (31 December 2019: outstanding contractual guarantee fee of US$5.0 million with corresponding fair value after provision for credit losses of US$4.4 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.

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$204 million as at 31 December 2020 (31 December 2019: US$225 million). 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 years ended 31 December 2020 and 2019 was at the annual rate of 3.07% by reference to the average outstanding principal balance under Gazprombank Facility. The guarantee fee charged for 2020 was US$6.7 million, with corresponding value of US$6.3 million after provision for expected credit losses (31 December 2019: US$5.6 million, with corresponding value of US$5.0 million after provision for expected credit losses). As at 31 December 2020 the remaining outstanding contractual guarantee fee was US$12.3 million, with corresponding value of US$11.9 million after provision for expected credit losses (31 December 2019: US$5.6 million, with corresponding value of US$5.0 million after provision for expected credit losses).

The following assets and liabilities have been recognised in relation to the ICBC Guarantee and Gazprombank Guarantee as at 31 December 2020 and 31 December 2019:

			31 DECEMBER 2020 US$'000	31 DECEMBER 2019 US$'000
Other receivables – ICBC Guarantee [(a)]			7	4,436
Other receivables – Gazprombank Guarantee [(b)]			11,919	4,981
Financial guarantee contract – Gazprombank Guarantee [(c), (d)]			8,232	8,923

(a) The fair value of the receivable, comprising billed 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 2020 and 2019.
(b) Amounts of guarantee fee that are expected to be received from IRC and calculated by applying annual rate of 3.07% for 2020 and 2019 by reference to the average outstanding principal balance under Gazprombank Facility for the relevant the period, less provision for ECL.
(c) 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.).
(d) Classified as "held for sale" and presented separately in the statement of financial position as at 31 December 2020 (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).

Other financing transactions

In March 2018, the Group entered into a loan agreement with Dr. Pavel Maslovskiy. As at 31 December 2020, the loan principal outstanding amounted to an equivalent of US$0.1 million, with corresponding value of US$nil after provision for expected credit losses (2019: US$0.2 million, with corresponding value of US$0.2 million after provision for expected credit losses). Interest charged during the year ended 31 December 2020 comprised an equivalent of US$0.01 million (2019: US$0.01 million). At 10 August 2020, Dr. Pavel Maslovskiy ceased to be a related party.

In April 2019, the Group entered into a loan agreement with Dr. Alya Samokhvalova. As at 31 December 2020 the loan principal outstanding amounted to an equivalent of US$0.3 million, with corresponding value of US$nil after provision for expected credit losses (2019: US$0.4 million, with corresponding value of US$0.4 million after provision for expected credit losses). Interest charged during the year ended 31 December 2020 comprised an equivalent of US$0.03 million (2019: US$0.02 million). At 12 October 2020, Dr. Alya Samokhvalova ceased to be a related party.

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 2020, the fair value of the derivative financial asset was US$nil million (31 December 2019: US$11.0 million) reflecting a loss on re-measurement to fair value of US$(11.0) million (31 December 2019: US$(2.0) million loss) (note 18).

There are no other related party relationships with Agestinia Trading Limited present.

Key management compensation
Key management personnel, comprising a group of 11 individuals during the period (2019: 14), 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.

			2020 US$'000	2019 US$'000
Wages and salaries			4,228	5,794
Pension costs			47	62
Share-based compensation			33	157
			4,308	6,013

27. Analysis of Net Debt

	AT 1 JANUARY 2020 US$'000	NET CASH MOVEMENT US$'000	EXCHANGE MOVEMENT US$'000	NON-CASH CHANGES US$'000	At 31 DECEMBER 2020 US$'000
Cash and cash equivalents	48,153	(9,104)	(3,645)	-	35,404
Borrowings	(609,463)	47,447[(a)]	-	25,996[(b)]	(536,020)
Net debt*	(561,310)	38,343	(3,645)	25,996	(500,616)
Lease liabilities [(c)]	(13,178)	4,153	1,022	3,860	(4,143)
Conversion option [(d)]	(46,313)	-	-	(42,775)	(89,088)
	(620,801)	42,496	(2,623)	(12,919)	(593,847)

(a) Being US$47.4 million interest paid on borrowings, which is presented as operating cash flows in the Statement of cash flows.
(b) Being principally accrued interest expense which is presented as operating cash flows in the Statement of cash flows when paid (note 9) and US$77.5 million of Bonds conversion into share.

(c) Note 23.
(d) Notes 18, 20 and 28.

	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 [(e)]	-	(53,414) [(f)]	(609,463)
Net debt◆	(568,025)	57,758	2,371	(53,414)	(561,310)
Lease liabilities [(g)]	(1,739)	1,879	(570)	(12,748)	(13,178)
Conversion option [(h)]	(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)

(e) 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).
(f) Being principally accrued interest expense which is presented as operating cash flows in the Statement of cash flows when paid (note 9).
(g) Note 23.
(h) Notes 18, 20 and 28.

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◆ (note 27) and equity (comprising issued capital, reserves and retained earnings). As at 31 December 2020, the capital comprised US$1.2 billion (2019: 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 2020, there are no material offsetting contracts (2019: 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

			2020 US$'000	2019 US$'000

Financial assets				
Financial assets at amortised cost				
Cash and cash equivalents			35,404	48,153
Trade receivables and contract assets			9,374	13,110
Loans granted to an associate			-	-
Other financial assets at amortised cost			18,139	10,441
Financial assets at FVPL				
Guarantee fee receivable			7	4,436
Listed equity securities			194	286
Derivative financial instruments			3,320	11,022
Financial liabilities				
Financial liabilities at amortised cost				
Trade and other payables			68,875	143,706
Borrowings			536,020	609,463
Lease liabilities			4,143	13,178
Derivative financial instruments			95,160	46,579
Financial guarantee contract			-	8,923

Fair value measurements

Recurring fair value measurements are set out below.

31 DECEMBER 2020	LEVEL 1 US$'000	LEVEL 2 US$'000	LEVEL 3 US$'000	Total US$'000
Financial assets				
Financial assets at FVPL:				
Guarantee fee receivable	-	-	7	7
Listed equity securities	194	-	-	194
Gold option contracts	-	172	-	172
Currency option contracts	-	3,148	-	3,148
Call option over non-controlling interests	-	-	-	-
Total financial assets	194	3,320	7	3,521
Financial liabilities				
Conversion option	-	-	89,088	89,088
Gold option contracts	-	5,668	-	5,668
Currency option contracts	-	404	-	404
Total financial liabilities	-	6,072	89,088	95,160

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	15,744
Financial liabilities				
Conversion option	-	-	46,313	46,313
Other	-	266	-	266
Total financial liabilities	-	266	46,313	46,579

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 2020 and 31 December 2019 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 2019	6,829	-	(2,411)	4,418
Purchases (note 26)	-	13,000	-	13,000
Cash settlements	(6,000)	-	-	(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)
Cash settlements	(5,000)	-	-	(5,000)
Gains/ (losses) recognised in net other finance gains/ (losses) (note 9)	571	(11,022)	(42,775)	(53,226)
31 December 2020	7	-	(89,088)	(89,081)

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				
	2020 US$'000	2019 US$'000	UNOBSERVABLE INPUTS	RANGE OF INPUTS	RELATIONSHIP OF UNOBSERVABLE INPUTS TO FAIR VALUE

Guarantee fee Receivable (note 26)	7	4,436	- Implied credit spread	- 11.5% (2019: 12.4%);	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$20 million (2019: US$71 million); - 45% (2019: 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)	(89,088)	(46,313)	- The Group's credit risk and implied credit spreads	- 9.33% (2019: 7.25%)	1% increase in credit spread would result in US$1.0 million increase in fair value (2019: US$4.2 million increase)

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	
	2020 US$'000	2019 US$'000	2020 US$'000	2019 US$'000
Russian Roubles	65,868	86,581	580,277	165,473

US Dollars [a]	8,100	10,759	423	4,169
GB Pounds Sterling	2,839	1,252	5,705	759
EUR	3	22	6,398	603
Other currencies	11	10	269	267

(a) US Dollar denominated monetary assets and liabilities in Group companies with Rouble functional currency.

The table set out below illustrates the Group's profit sensitivity to changes in exchange rates by 25% (2019: 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.

			2020 US$'000	2019 US$'000
Russian Rouble currency impact			128,602	19,723
US Dollar currency impact			1,919	1,647
GB Pounds Sterling currency impact			716	123
EUR currency impact			1,599	145
Other currencies			65	64

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$204 million outstanding principal under the Gazprombank Facility (notes 14 and 26).

The major financial assets are cash and cash equivalents of US$35.4 million (2019: US$48.2 million) and receivables from IRC with an aggregate carrying value of US$13.8 million (2019: US$12.3 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 2020, the credit rating for IRC, calculated as shadow credit rating using a Moody's scorecard methodology, was B3.

COUNTERPARTY		CREDIT RATING	CARRYING AMOUNT AT 31 DECEMBER 2020 US$'000	CARRYING AMOUNT AT 31 DECEMBER 2019 US$'000
Gazprombank		BBB-	12,676	28,616
Asian-Pacific		B	10,330	483
Sberbank		BBB	8,209	8,501
Citibank		AA-	3,357	2,073
VTB		BBB-	559	5,936
Other			273	2,544

			35,404	48,153

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$'000	OTHER FINANCIAL ASSETS AT AMORTISED COST US$'000	FINANCIAL GUARANTEE CONTRACT US$'000	TOTAL US$'000
Loss allowance at 1 January 2020	1,219	2,370	8,923	12,512
Increase in loss allowance	555	822	-	1,377
Written off during the year	(32)	(356)	-	(388)
Unused amount reversed	(333)	-	(691)	(1,024)
Exchange differences	(276)	(369)	-	(645)
Loss allowance at 31 December 2020	1,133	2,467	8,232	11,832

	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

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 2020 and 2019, 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$'000	6+ YEARS US$'000
2020						
Borrowings						
Convertible bonds	-	-	-	-	38,000	-
Notes	-	-	500,000	-	-	-
Future interest payments [(a)]	-	42,976	43,760	3,135	2,351	-
Trade and other payables	47,755	21,120	-	-	-	-
Lease liabilities	894	1,234	618	564	550	2,234
Financial guarantee contract [(b)]	203,871	-	-	-	-	-
Total non-derivative financial liabilities	252,520	65,330	544,378	3,699	40,901	2,234
Gold option contracts	950	4,718	-	-	-	-
Currency option contracts	2	402	-	-	-	-
Total derivative financial liabilities	952	5,120	-	-	-	-
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	-	-	-	-	-

(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.

29. Operating lease arrangements

The Group as a Lessor

The Group earned property rental income during the year of US$0.6 million (2019: US$0.7million) on buildings owned by its subsidiary Irgiredmet.

30. Commitments and Contingencies

Capital Commitments
At 31 December 2020, the Group had entered into contractual commitments in relation to the acquisition of property, plant and equipment amounting to US$3.5 million, including US$2.0 million in relation to Pioneer Flotation project and US$0.9 million in relation to Malomir Flotation project. (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, including US$7.4 million in relation to Pioneer Flotation project and US$2.5 million in relation to POX Hub project.)

Contingencies
On 23 November 2020, the company announced that it had engaged KPMG LLP to carry out an independent review of certain transactions undertaken by the company and its subsidiaries or IRC and its subsidiaries in the three years to August 2020 pursuant to Resolution 19. PWC Advisory in Russia have also been appointed to carry out a further transactional review. This work in ongoing.

The Group may be exposed to the risk of civil, criminal or regulatory actions and liabilities (including fines and penalties) may accrue to the Group if it becomes apparent that transactions have been entered into with related parties of the Group without proper processes having been followed, including proper approvals obtained and/or disclosures made.

At the current time the existence, timing and quantum of potential future liability (if any) including fines, penalties, damages or other consequences arising from any such transactions or failures to obtain all proper approvals or make proper disclosures cannot be determined or measured. As a consequence, no associated liabilities have been recognised in relation to these matters in the consolidated statement of financial position as at 31 December 2020.

31. Subsequent events

In April 2021, the Group signed RUB5 billion (an equivalent of approximately US$67 million) revolving credit facility with Gazprombank valid until May 2022. The following amounts have been drawn down:
- US$10 million, bearing 3.7% interest and repayable within 12 months; and
- US$7 million, bearing 2.9% interest and repayable within 6 months.

32. Reconciliation of non-GAAP measures (unaudited)

		2020 US$'000	2019 US$'000
(Loss)/profit for the year		(48,882)	25,693
Add/(less):			
Net impairment reversals on financial instruments		(1,000)	(30,797)
Investment and other finance income		(7,754)	(8,826)
Interest expense		58,533	59,854
Net other finance losses		67,957	42,190
Foreign exchange (gains)/losses		(32,647)	20,808
Taxation		76,069	27,246
Depreciation		134,079	137,775

Impairment/(reversal of impairment) of mining assets and in-house service		58,806	(52,159)
Impairment of exploration and evaluation assets		16,112	-
Write-down of inventory to net realisable value		1,215	-
Reversal of impairment of ore stockpiles		-	(2,778)
Impairment of gold in circuit		77	142
Impairment of bullion in process		41	-
Write-down to adjust the carrying value of net assets of disposal group to fair value less costs to sell		55,798	-
Share of results of associate [(a)]		(27,680)	45,699
Underlying EBITDA◆		350,724	264,847

(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/reversal of impairment recognised against investment in the associate (note 14).

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.

			PROPORTION OF SHARES HELD BY PETROPAVLOVSK PLC [(a)]		PROPORTION OF SHARES HELD BY THE GROUP [(a)]	
PRINCIPAL SUBSIDIARY, JOINT VENTURE AND ASSOCIATE UNDERTAKINGS	**COUNTRY OF INCORPORATION**	**PRINCIPAL ACTIVITY**	**31 DECEMBER 2020**	**31 DECEMBER 2019**	**31 DECEMBER 2020**	**31 DECEMBER 2019**
Subsidiaries						
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%	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 Perspektiva DV	Russia	Gold exploration and production	-	-	99.94%	99.94%
LLC Vostok Geologiya	Russia	Gold exploration and production	-	-	99.94%	99.94%
LLC Kapstroi	Russia	Construction	-	-	100%	100%

		services				
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 Gydrometallurgia	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]	Hong Kong	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.

			PROPORTION OF SHARES HELD BY PETROPAVLOVSK PLC [a]		PROPORTION OF SHARES HELD BY THE GROUP [a]	
PRINCIPAL SUBSIDIARY, JOINT VENTURE AND ASSOCIATE UNDERTAKINGS	**COUNTRY OF INCORPORATION**	**PRINCIPAL ACTIVITY**	**31 DECEMBER 2020**	**31 DECEMBER 2019**	**31 DECEMBER 2020**	**31 DECEMBER 2019**
IRC and its principal subsidiary and joint venture undertakings (‘IRC’)						
IRC Limited	Hong Kong	Management and holding company	-	-	31.10%	31.10%
Principal subsidiaries of IRC						
LLC Petropavlovsk-Iron Ore	Russia	Management company	-	-	31.10%	31.10%
Ariti HK Limited	Hong Kong	General trading	-	-	31.10%	31.10%
LLC KS GOK	Russia	Iron ore exploration and production	-	-	31.10%	31.10%
LLC GMMC	Russia	Iron ore exploration and production	-	-	30.97%	30.97%
LLC Garinskaya Infrastructure	Russia	Transportation services to Garinskoye project	-	-	31.10%	31.10%
LLC Kostenginskiy GOK	Russia	Iron ore exploration and production	-	-	31.10%	31.10%
OJSC Giproruda	Russia	Engineering services	-	-	21.86%	21.86%

LLC Uralmining	Russia	Ilmenite and iron ore exploration and production	-	-	31.10%	31.10%
Principal joint ventures of IRC						
Heilongjiang Jianlong Vanadium Industry Co., Ltd	China	Vanadium project	-	-	14.31%	14.31%

(a) In the ordinary class of shares.

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 2020 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	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	Russia	100%	675000, Amur Region, Blagoveshchensk, 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, Blagoveshchensk, Lenina Street, 140/1
LLC Albynskiy Rudnik	Russia	100%	675000, Amur Region, Blagoveshchensk, Lenina Street, 140/1
LLC Osipkan	Russia	100%	675000, Amur Region, Blagoveshchensk, 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, Blagoveshchensk, Lenina Street, 140/1
LLC AGPK	Russia	99.38%	675000, Amur Region, Blagoveshchensk, 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 Kapstroi	Russia	100%	675002, Amur Region, Blagoveshchensk, Pervomayskaya Street, 62/1
LLC NPGF Regis	Russia	100%	675027, Amur Region, Blagoveshchensk, 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 Gydrometallurgia	Russia	100%	196247, St. Petersburg, Leninskiy Prospekt, 151, level 6, office 635, 26
LLC BMRP	Russia	100%	675016, Amur Region, Blagoveshchensk, Kalinina Street, 137
LLC AVT-Amur	Russia	49%	675000, Amur Region, Blagoveshchensk, 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
LLC Atlas Mining	Russia	100%	111024, Moscow, 2nd Entuziastov Street, 5, level 3, V, room 23, office 3
Universal Mining Inc.	Guyana	100%	Lot 8 Pere Street, Kitty, Georgetown
Petropavlovsk (Cyprus) Limited	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
Cayiron Limited	Cayman Islands	100%	4th Floor, Harbour Place, 103 South Church Street, P.O. Box 10240, Grand Cayman KY1-1002
Associates			
IRC Limited [b]	HK	31.10%	6H, 9 Queen’s Road Central, Central, Hong Kong
Subsidiaries of IRC			
LLC Petropavlovsk- Iron Ore	Russia	31.10%	127055, Moscow, Lesnaya Street, 43, Office 313
LLC Olekminsky Rudnik	Russia	31.10%	676253, Amur Region, Tyndinskiy District, Village Olekma

(a) In the ordinary class of shares.
(b) IRC Limited and its principal subsidiary and joint venture undertakings.

NAME OF UNDERTAKING	COUNTRY OF INCORPORATION	PROPORTIONOF 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 GMMC	Russia	30.97%	675028, Amur Region, Blagoveshchensk, Ignatievskaya Road, 19
LLC Kostenginskiy GOK	Russia	31.10%	679000, The Jewish Autonomous Region, Birobidzhan, 60-Letiya SSSR Street, Building 22B.
LLC Orlovsko-Sokhatinsky Rudnik	Russia	31.10%	675028, Amur Region, Blagoveshchensk, Ignatievskaya Road, 19
OJSC Giproruda	Russia	21.86%	196247, St. Petersburg, Leninskiy Prospect,151, Liter A
CJSC SGMTP	Russia	31.10%	682813, RF, Khabarovsk Territory, Town Sovetskaya Gavan, Goncharova Street, 2, room 5I(27-29)
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	15 .58%	101000, Moscow, Pokrovka Street,1/13/6 Building 2, Office 35
LLC Garinskaya Infrastructure	Russia	31.10%	675028, Amur Region, Blagoveshchensk, 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	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Rumier Holdings Ltd	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Guiner Enterprises Ltd	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Expokom (Cyprus) Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Arfin Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Caedmon Ltd	Cyprus	15.58%	Souliou 14, Aglantzia, 2102 Nicosia
Thorholdco (Cyprus) Limited	Cyprus	31.10%	Souliou 14, Aglantzia, 2102 Nicosia
Heilongjiang Jiatai Titanium Co., Ltd	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
Joint ventures of IRC			
Heilongjiang Jianlong Vanadium Industry Co., Ltd	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.

Review of Ore Reserves and Mineral Resources as at 31 December 2020

In line with industry practices, Petropavlovsk reports its Mineral Resources and Ore Reserves in accordance with the JORC Code. The Mineral Resource and Ore Reserve estimates are an update to 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. 2020 exploration results were included with the exception of data on Elginskoye, Unglichikanskoye, Tokur and Osipkan. On-going exploration work at these areas is considered to be incomplete due to delays caused by the COVID-19 pandemic and management changes. Tokur Mineral Resources, which previously were reported as a 2010 historical estimate prepared in accordance with JORC Code (2004), were re-stated in accordance with the JORC Code (2012). To reflect gold price trends, the company increased its long-term gold price assumption for Mineral Resource reporting from US$1,500/oz, used in 2017, to US$1,700/oz for the 2020 and 2021 updates. Similarly, the long-term gold price assumption for Ore Reserve reporting was increased from US$1,200/oz to US$1,400/oz for the 2020 and 2021 updates.

As of 31 December 2020, the total Group Mineral Resources (including Reserves) amounted to 19.50Moz of gold compared to 21.03Moz twelve months previously, with total Reserves amounting to 7.16Moz compared to 8.46Moz in the previous year. The reduction in Mineral Resources is due to the use of more conservative open pit constraints at Elginskoye and a re-evaluation of the Tokur Mineral Resource in accordance with JORC Code 2012. The previous Tokur historical estimate included in the 2020 disclosure was prepared in 2010 by WAI following guidelines of the older version of the code.

The prime reason for the decrease in Ore Reserves is the removal of Tokur Ore Reserves which could not be reported under JORC Code 2012, the removal of Ore Reserves for the Quartzitovoye open pit, Malomir tailings and low grade stockpiles across all assets. The Quartzitovoye open pit, Malomir tailings and low grade stockpiles were removed from the reserve estimate due to uncertainties around the feasibility of gold production from these assets. Mine depletion also contributed to the reduction of Mineral Resource and Ore Reserves.

The tables below provide a summary of the Group's Mineral Resources and Ore Reserves as of 31/12/2020. Detailed Mineral Resource and Ore Reserve statements by asset are available on the company's website.

Group Ore Reserves as at 31/12/2020
(in accordance with the JORC Code 2012)

Total Open Pit and Underground Ore Reserve

	Category	Tonnage (kt)	Grade (g/t Au)	METAL (Moz)
Total	*Proved*	22,806	0.96	0.70
	Probable	204,909	0.98	6.46
	Proved+Probable	227,715	0.98	7.16
Non-Refractory	*Proved*	5,865	0.75	0.14
	Probable	50,748	1.00	1.63
	Proved+Probable	56,612	0.97	1.77
Refractory	*Proved*	16,941	1.03	0.56
	Probable	154,161	0.97	4.83
	Proved+Probable	171,103	0.98	5.39

Total Open Pit Ore Reserve

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz)
Total	*Proved*	22,806	0.96	0.70
	Probable	203,765	0.95	6.22
	Proved+Probable	226,571	0.95	6.93
Non-Refractory	*Proved*	5,865	0.75	0.14
	Probable	50,098	0.95	1.53
	Proved+Probable	55,962	0.93	1.67
Refractory	*Proved*	16,941	1.03	0.56
	Probable	153,667	0.95	4.70
	Proved+Probable	170,609	0.96	5.26

Total Underground Ore Reserve

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz)
Total	*Proved*	-	-	-
	Probable	1,144	6.37	0.23
	Proved+Probable	1,144	6.37	0.23
Non-Refractory	*Proved*	-	-	-
	Probable	650	4.90	0.10
	Proved+Probable	650	4.90	0.10
Refractory	*Proved*	-	-	-
	Probable	494	8.32	0.13
	Proved+Probable	494	8.32	0.13

(1) Group Ore Reserves statements are prepared internally in April 2021 as an update of the April 2017 WAI estimate.
(2) 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.
(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) The Underground Reserves cut-off grade for reporting is 1.5g/t Au.
(6) Reserve figures have been adjusted for anticipated dilution and mine recovery.

(7) Group Ore Reserve estimates were prepared under the supervision of and verified by Mr. Anton Kornitskiy, who is a 'Competent Person' as defined by JORC Code 2012. Mr. Kornitskiy is an employee of Petropavlovsk PLC.
(8) Figures may not add up due to rounding.

Group Mineral Resources as at 31/12/2020
(in accordance with the JORC Code 2012)

Total Open Pit and Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz)
Total	*Measured*	44,916	0.88	1.28
	Indicated	438,968	0.83	11.69
	Measured+Indicated	483,884	0.83	12.97
	Inferred	314,861	0.65	6.53
Non-Refractory	*Measured*	15,240	0.94	0.46
	Indicated	102,797	0.98	3.23
	Measured+Indicated	118,037	0.97	3.69
	Inferred	137,589	0.60	2.67
Refractory	*Measured*	29,676	0.85	0.81
	Indicated	336,172	0.78	8.46
	Measured+Indicated	365,847	0.79	9.28
	Inferred	177,272	0.68	3.87

Total Open Pit Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz)
Total	*Measured*	43,650	0.77	1.08
	Indicated	433,231	0.79	11.03
	Measured+Indicated	476,882	0.79	12.11
	Inferred	304,140	0.58	5.70
Non-Refractory	*Measured*	13,975	0.58	0.26
	Indicated	98,024	0.87	2.76
	Measured+Indicated	111,999	0.84	3.02
	Inferred	127,449	0.46	1.89
Refractory	*Measured*	29,676	0.85	0.81
	Indicated	335,207	0.77	8.28
	Measured+Indicated	364,883	0.78	9.09
	Inferred	176,690	0.67	3.81

Total Underground Mineral Resources

	Category	Tonnage (kt)	Grade (g/t Au)	Metal (Moz)
Total	*Measured*	1,265	4.93	0.20
	Indicated	5,737	3.56	0.66
	Measured+Indicated	7,002	3.81	0.86
	Inferred	10,721	2.43	0.84
Non-Refractory	*Measured*	1,265	4.93	0.20
	Indicated	4,772	3.08	0.47
	Measured+Indicated	6,037	3.47	0.67

	Inferred	10,139	2.38	0.78
Refractory	*Measured*	-	-	-
	Indicated	965	5.96	0.18
	Measured+Indicated	965	5.96	0.18
	Inferred	581	3.31	0.06

(1) Mineral Resources include Ore Reserves.
(2) Mineral Resource estimates were prepared internally by the Group in accordance with JORC Code 2012 as an update of the April 2017 statement audited by WAI.
(3) Open Pit Mineral Resources are constrained by conceptual open-pit shells at a US$1,700/oz long term gold price.
(4) The cut-off grade for Mineral Resources for open pit mining varies from 0.30 to 0.50g/t depending on the type of mineralisation and proposed processing method.
(5) A cut-off grade of between 1.0 and 1.5g/t is used to report Mineral Resources for potential underground mining.
(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) Group Mineral Resource estimates were prepared under the supervision of and verified by Mr. Anton Kornitskiy, who is a 'Competent Person' as defined by JORC Code 2012. Mr. Kornitskiy is an employee of Petropavlovsk PLC.
(9) Figures may not add up due to rounding

2020 Exploration Update

Pioneer

Exploration at Pioneer and Pokrovskiy was focused on the Alexandra and Pokrovka 2 deposits. Exploration relating to underground production at the NE Bakhmut zone also generated some positive results.

Eight holes were drilled at Alexandra which increased confidence in the Mineral Resource estimate. Following these positive results, the company is considering an expansion of the open pit which, if completed, would add between 50 and 80koz of non-refractory reserves.

Metallurgical tests were also completed on the Pokrovka 2 and Vodorazdelniy zones of the Pokrovskiy deposit to check their suitability for processing via the Pioneer flotation plant. Positive metallurgical tests results on Pokrovka 2 material enabled the partial conversion of the Pokrovka 2 resources to refractory JORC Reserves, adding 74koz of gold to the Reserve statement. This material has been scheduled for mining and processing in 2021-2022. The results of the Vodorazdelniy tests were less encouraging and indicated this zone is less suitable for processing due to the low quality of its flotation concentrate.

Underground development completed at NE Bakhmut zones 2 and 3 proved mineralisation continues down-dip and added c.30koz to Mineral Resources. High grade mineralisation remains open down-dip at both zones. There are signs of grade and thickness decline at NE Bakhmut 3; however, the quality of the orebody at the deepest level of NE Bakhmut 2 remains high. The Group plans underground drilling at NE Bakhmut 2 in 2021 to explore the orebody further down-dip.

Albyn (Elginskoye)

Exploration continued at Elginskoye which improved confidence in the resource estimate and identified further extensions of the deposit towards the north west. A total of 38,222m of drilling and 54,779 m3 of trenching were completed at Elginskoye. Further metallurgical tests completed during 2020 indicated that Elginskoye might be more efficiently exploited using a gravity-flotation-POX processing route without selective mining of refractory and non-refractory types.

687m of drilling and 160,774 m^3 of trenching and pre-strips were completed at the Kera prospect to the west of Elginskoye. Pre-strips confirmed grade and structural continuity of a key mineralised zone at Kera. Using a cut-off grade of 0.5g/t, the mineralisation sampled in the pre-strip has an average thickness of 2.4m@4.79g/t. Drilling comprised of 5 drill holes which confirmed mineralisation down-dip to a depth of 130m. The best drill intersections include 6.1m@3.35g/t and 7.3m@4.72g/t. Two maiden metallurgical tests completed on core material showed mixed results with cyanide recoveries of 89.15% and 61.02%. Overall, the Kera prospect is considered as being a potential satellite deposit of Elginskoye, warranting further exploration.

Drilling completed to the west of the Albyn pit at the Sukholozhskoye mineralised zone identified several high-grade intersections, including 6.5m@27.71g/t and 1.0m@8.04g/t.

Exploration at Unglichikanskoye comprised of drilling (2,478m) and trenching (19,438.1m^3). Drilling was concentrated at the south group of mineralised zones and it proved c.70m of down dip extensions to the mineralisation. The best intersections include 6.0m@2.25g/t, 5.1m@2.10g/t, 4.1m@2.19g/t, 4.8m@2.71g/t. These results are yet to be reflected in the Unglichikanskoye resource statement. Trenching at the periphery of the Unglichikanskoye property failed to identify significant gold mineralisation.

Malomir

Exploration at Malomir concentrated on the surrounding areas, including Tokur, Osipkan and Mariinskoye. Some exploration was also completed at the Quartzitovoye underground mine.

Underground drilling and samples taken from underground workings did not confirm earlier assumptions of ore continuity at deeper levels of the deposit. This resulted in a decrease in underground resources at Quartzitovoye which shortened the Quartzitovoye underground mine life.

Exploration completed at Tokur and Osipkan included drilling and trenching. Approximately 6km of drilling and 73,216.5m^3 of trenching were completed at Tokur, whilst almost 11km of drilling and 130,521.4m^3 of trenching were completed at Osipkan. The exploration program is aiming to upgrade parts of the Tokur and Osipkan resources into the JORC Indicated category which should allow a maiden Ore Reserve estimate to be made for Tokur in 2021. Drill intersections at Tokur have an average thickness of 13.5m@1.78g/t. At Osipkan, the average grade of drill intersections is 0.94g/t with an average thickness of 6.0m. Both Tokur and Osipkan drilling and trenching results are consistent with historical data. This exploration program is still in progress with many assays pending and results have yet to be evaluated and reflected in the Group JORC Resource statement.

Exploration at Mariinskoye commenced in 2020. Work included geological reconnaissance, geochemical and chip samples, ground magnetic and electrical geophysical surveys. Many indications of the presence of gold mineralisation were discovered, including sulphide mineralisation with gold grades of up to 0.5g/t in chip samples and up to >1.0g/t in geochemical samples (1.0g/t being upper detection limit of the assay method employed). The exploration program is at an early stage and work is expected to continue in 2021.

Verkhne-Udskaya & Chogarskaya

These two properties in the Khabarovsk region are considered as potential satellites to the Malomir deposits. The 2020 exploration focus was on the Verkhne-Udskaya property where 6,797.3m of drilling and 194,292m^3 of trenching were completed. Earlier work discovered the Zapadniy, Egokonga and Kolbokan prospects within Verkhne-Udskaya. The majority of exploration in 2020 took place at Zapadniy were two mineralised zones hosted by thrust zones of potential economic interest were explored by drilling and trenching. Based on assays completed so far, the average grade of Zapadniy mineralisation is 1.06g/t with an average thickness of 5.7m. A formal resource estimate in accordance with the JORC Code is yet to be prepared for Zapadniy, although preliminary estimates show a mineral resource target of c.70koz. Preliminary metallurgical tests showed mixed response to cyanidation, with recoveries varying between 57 and 96%. Early stage exploration work completed at the Egokonga prospect has discovered a 10km long gold-bearing structure which is yet to be systematically sampled. A few trenches completed here discovered grades up to 2.04g/t in selected samples. Early-stage prospecting competed at Kolbokan in 2020 discovered an encouraging mineralised zone hosted by conglomerates with grades up to 1.29g/t.

Exploration and prospecting at Chogarskaya included geological reconnaissance, ground magnetic and lithochemical surveys as well as some trenching. The lithochemical survey discovered a 3km long gold bearing zone that warrants further investigation. Trenches completed at a geochemical anomaly discovered in a 2018 survey found some high-grade mineralisation with grades up to 25g/t in selected samples. The best intersections include 1.3m@14.03g/t and 3.0m@2.17g/t. Chogarskaya exploration results are considered encouraging and further work is planned for 2021.