

18 March 2020

Ferrexpo plc

(“Ferrexpo”, the “Group” or the “Company”)

2019 Full Year Results

Ferrexpo PLC, a FTSE 250 iron ore pellet producer, today announces its full year audited financial results for the 12 months ended 31 December 2019.

Financial Highlights

- Revenue up 18% to US\$1.5 billion due to higher iron ore fines prices and an increase in sales volumes
- Underlying EBITDA^A up 17% to US\$586 million (2018: US\$503 million)
- 62% increase in net cash flows from operations to US\$473 million (2018: US\$292 million)
- Net debt^A to underlying EBITDA reduced to 0.48 times
- Capital investment^A increased 83% to US\$247 million (2018: US\$135 million)

Steve Lucas, Non-Executive Chairman, said:

“Ferrexpo has continued to deliver strong cash flow generation which is up 62% year on year. This has enabled us to allocate capital to further reduce debt, to increase investment to drive medium term growth, and to pay record dividends to shareholders.”

“I am also pleased to report that the Group had no fatalities in 2019 (2018: one fatality) and that the Group’s Lost time injury frequency rate (“LTIFR”) declined to 0.58 times – a record low for the Group.

“The safety and wellbeing of our employees is paramount. That is why we are taking precautions to mitigate the risk of infection from the COVID-19 virus. This includes cancellation of business trips in accordance with respective government advice, also in locations where the COVID-19 virus has had a more severe impact, Ferrexpo has stipulated a working from home requirement. We have been following and will continue to follow the advice from health authorities in Ukraine, as well as other jurisdictions where our employees are based.

“During 1Q 2020, COVID-19 began causing disruption to Chinese supply chains impacting the distribution networks of steel producers and their customers. This could result in short-term volatility for the iron ore market as high levels of steel inventory, built up during this period, are released into the supply chain once normal operations resume. Early signs are indicating that the Chinese economy is beginning to recover from the peak of the COVID-19 virus.

“The spread of the virus into Europe, however, could result in further economic uncertainty. Prior to the virus, we had expected steel profitability in Europe to show a mild recovery in key markets from the second half of the year onwards.

“Amidst this backdrop, Ferrexpo remains well placed to manage our way through the current uncertainties due to our low cost position relative to our peers, our well invested asset base, our premium customer portfolio and our strong balance sheet.

“Nevertheless, given this general market uncertainty, the Board has deferred its decision on a final ordinary and/or special dividend to an appropriate time when the market situation and the effect of the COVID-19 virus has become clearer. At this point, the Board intends to declare a dividend and will keep the market updated.”

2019 Financial Summary:

US\$ million (unless otherwise stated)	Year ended 31.12.19	Year ended 31.12.18	Change %
Pellet production from own ore (kt)	10,519	10,506	+0.1%
Sales volumes (kt)	10,312	10,227	+0.8%
Avg PLATTS CFR 62% Fe iron ore fines price (US\$/t)	93	69	+35%
Avg PLATTS CFR 65% Fe iron ore fines price (US\$/t)	104	90	+16%
Revenue	1,507	1,274	+18%
Average C1 cash cost ^A (per tonne)	47.8	43.3	+10%
Underlying EBITDA ^A	586	503	+17%
Diluted EPS (US cents)	68.4	56.7	+21%
Net cash flow from operating activities	473	292	+62%
Capital investment ^A	247	135	+83%
Net debt ¹	281	339	-17%
Cash	131	63	+108%
Net debt to EBITDA ^A	0.48	0.67x	-28%

Notes:

¹Net debt as of 31 December 2019 included a US\$7 million effect from the first time application of IFRS16 *Leases*.

ALTERNATIVE PERFORMANCE MEASURES: Words with the symbol ^A are defined in the Alternative Performance Measures section on pages 55-57.

Health and Safety

- No work related fatalities (FY 2018: one)
- Group lost time injury frequency rate 0.58 per million man hours (FY 2018:1.18, 1H 2018: 0.97)

Market Environment

- Average realised FOB price increased 17% compared to 2018
- Despite periods of regional demand weakness through the year, the Group was pleased to renew and/or extend several key long-term contracts as well as secure a new long-term contract with a leading German steel mill

Operational Highlights

- 3% increase in production of 65% Fe pellets from own ore compared to 2018
- Proportion of high quality 65% Fe pellet increased to 96% of total output (2018: 94%)
- 1% increase in sales volumes compared to 2018
- C1 cash cost US\$47.8 per tonne up US\$4.5 per tonne reflecting domestic inflation of 4% and a 14% appreciation of the local currency during the year
- Capital investment increased to US\$247 million reflecting modernisation of processing facilities and near term growth projects to increase production by 1.5MT to 12MTPA by 2021

Corporate Governance

- Appointment of Graeme Dacomb, a retired partner from Ernst & Young, as an independent non-executive director and as Chair of the Audit Committee
- Appointment of Fiona MacAulay, who has extensive operational experience in emerging markets in the upstream oil and gas sector, as an Independent Non-Executive director and as Chair of the Remuneration Committee. As of 12 February 2020, Fiona MacAulay became Chair of the HSEC Committee
- Conclusion of the Independent Review into the use of funds donated by Ferrexpo to the Blooming Land Charity
- Kostyantyn Zhevago temporarily stepped down as CEO in October 2019 to focus on resolving certain matters in Ukraine relating to one of the businesses he owned until 2015

Analyst conference call and webcast

Ferrexpo will host an analyst presentation today via audio webcast which will start at 09:00 GMT.

To join the webcast, please follow this link <https://edge.media-server.com/mmc/p/fzit7kc8>

If you wish to join via audio, please see below for dial in details and instructions:

DIAL IN NUMBERS

Participant

1. 10 minutes prior to the start of the call, dial the appropriate Participant Dial-In Number listed in the Conference Dial-In Number section below.
2. Provide the Operator with the Conference ID Number.

Conference ID 3496277

Participant Standard International Dial-In: +44 (0) 203 009 5710

Participant UK Local Call Dial-In Number: 0844 493 3857

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Notes to Editors:

Ferrexpo is a Swiss headquartered iron ore company with assets in Ukraine. It has been mining, processing and selling high quality iron ore pellets to the global steel industry for 40 years. In 2019, the Group produced 10.5 million tonnes of pellets ranking it as the 3rd largest exporter of pellets to the global steel industry with a market share of approximately 8%. Ferrexpo has a diversified customer base supplying steel mills in Austria, Germany, Japan, South Korea, Taiwan, China, Slovakia, the Czech Republic, Turkey, Vietnam and America. Ferrexpo has a premium listing on the main market of the London Stock Exchange. Since its IPO in 2007, the Group has paid approximately US\$750 million in dividends to shareholders, invested over US\$2.5 billion of capital into its operations and paid US\$829 million in taxes and royalties to the Ukrainian government. For further information, please visit www.ferrexpo.com

CHAIRMAN'S STATEMENT

Health and safety

I am very pleased to be able to report that the Group had no fatalities in 2019 (2018: one fatality). Furthermore, the Group's lost time injury frequency rate ("LTIFR") declined to 0.58x – a record for the Group and a strong improvement on 2018 when the Group LTIFR was 1.18x.

This performance is thanks to a relentless focus in our operations on the safety of our people, improving the reporting of near-miss incidents and a determined focus on training.

COVID-19

The Board is closely monitoring the impact of the virus on the world, our people and our key customers and suppliers. Meanwhile, the health of our staff is of the highest priority and we have implemented a number of measures to protect our workforce as far as practicable.

Year in summary for all stakeholders

At the end of a year which has posed a number of challenges, I am pleased to be able to report a strong set of financial results and significant progress on corporate governance matters (see Corporate Governance below).

Ferrexpo's operations continued to perform strongly in 2019. Production of high quality 65% Fe pellets from own ore increased 3% to 10.1 million tonnes (2018: 9.8 million tonnes) while sales volumes increased to 10.3 million tonnes (2018: 10.2 million tonnes). Despite lower demand from some steel mills compared to 2018, the Group signed new long-term contracts for supply into Germany and Taiwan as well as renewing a long-term contract for supply into Japan. Ferrexpo has a geographically diversified sales portfolio which allowed the Group to maintain consistent supply to the market despite some periods of weaker demand from specific regions during the year.

Reported underlying EBITDA for the year rose 17% to US\$586 million compared to US\$503 million in 2018. Net cash flow from operations increased by 62% to US\$473 million compared to US\$292 million.

Total dividends declared for the 2019 financial year amount to 13.2 US cents per share (2018: 23.1 US cents per share). The Board is committed to dividends and intends to consider a potential final ordinary and/or special dividend for the 2019 financial year once the general market situation and the effect of the COVID-19 virus has become clearer. Overall, in 2019 the Group paid out dividends of US\$155 million, a 60% increase on 2018 when US\$97 million was paid.

During the year, the Group paid taxes and royalties of US\$114 million in Ukraine (2018: US\$73 million) while it remained a major customer of state infrastructure in areas such as electricity, gas and railway facilities. The Group was the largest exporter of iron ore pellets in the region and accounted for approximately 2% of Ukraine's total exported goods in 2019.

In 2019, Ferrexpo's workforce totaled 10,767 people (including subcontractors). Total employee benefits paid to employees were US\$109 million (2018: US\$86 million). Average salaries at FPM in 2019 were 60% above the national average in Ukraine¹.

In terms of community developments in 2019, US\$6 million was invested directly into local community projects (2018: US\$6 million) including refurbishment of an X-ray room in a municipal hospital, creation of a salt spa therapy room in a municipal hospital, refurbishment of the local chess club, continued support for our local rowing club, Gornyak, as well as supporting preparations for the 2020 Summer Olympic games through the purchase of equipment, rowing boats and oars. At five local schools classes were updated with the latest technology such as the physics room, IT, mathematics and technical drawing classes. In terms of infrastructure development, a new community square was built with a children's playground as well as an audio system and a big screen.

Ferrexpo's scope 1 and 2 carbon intensity ratio was 240 kg of CO₂ per tonne of pellets produced in 2019 (2018: 237 kg per tonne of pellets). The increase was primarily as a result of a 1% increase in electricity consumption due to a 5% increase in tonnes of ore processed during the year. The use of sunflower husks to partially heat the Group's pelletisers, as an alternative energy source, increased 15% in 2019². For the first time, Ferrexpo is publishing its estimate of its downstream scope 3 emissions. Downstream scope 3 emissions represent the emissions from activities that relate to the distribution and use of the Group's pellets. Ferrexpo's scope 3 emissions in 2019 were estimated to be 10.0 million tonnes (2018: 9.9 million tonnes). Ferrexpo's calculation of scope 3 emissions utilizes independent research from CRU. The research shows that steel mills produce 38% less greenhouse gasses if they use Ferrexpo's magnetite iron ore pellets instead of the more commonly used iron ore fines.

¹ Source: www.ukrstat.gov.ua/

² Sunflower husks are reported separately to CO₂ emissions given they are a sustainable energy source

Finally, in March 2019 the Group commissioned Knight Piésold Consulting to conduct an independent review of our tailings storage facility in terms of design, construction and operational management (in addition to regular inspections by the Ukrainian government and internal specialists). The conclusion of the Knight Piésold report was that our tailings facility is an appropriate design for the volume of tailings being deposited, it is well managed and it has an appropriate inspection and monitoring regime. The report raised a number of key differences between the structure of Ferrexpo's tailings dam and the Brumadinho dam in Brazil that failed in January 2019, specifically the topography of the area of construction of Ferrexpo's dam is on flat land (rather than valley fill), with embankments at a shallower angle and dam walls constructed using a mixture of materials including coarse compacted rock (as opposed to un-compacted material). The report made a number of recommendations with regard to improving the dam's operational controls, which the Company is now looking to adopt.

Corporate governance

A number of corporate governance changes were made during the year which are described in further detail below. When considering corporate governance, it is worth taking into account that Ferrexpo's production base resides exclusively in Ukraine, currently rated Caa1 by Moody's. This is a non-investment grade rating and classifies the country as having substantial risks.

Since Ferrexpo's IPO on the London Stock Exchange in 2007, the Board has managed a variety of risks including regional geopolitical tensions as well as counterparty risks in areas such as payments to local third parties, recovery of VAT, the requirement to prepay corporate profit tax and the management of legal and other related claims, amongst others.

For further information see the Principal Risks on page 22.

The following sections detail how we have focused on corporate governance in 2019.

Independent review of Blooming Land charity

As announced in February 2019, the Group established an Independent Review Committee ("IRC") to investigate the use of funds donated by Ferrexpo to a Ukrainian charity called Blooming Land (the "Charity"). The work of the IRC and its advisers included a forensic review undertaken by BDO LLP, a review of relevant documentation, interviews with Ferrexpo employees and Directors, correspondence with the Charity, and other third parties together with advice from legal counsel in the UK and Ukraine.

The IRC was unable to conclude as to the ultimate use of all of Ferrexpo's funds by the Charity, a third party.

Donations to the Charity were suspended in May 2018, and in August 2019 the Group formally terminated the relationship. The Board's current policy regarding charitable donations is to only support causes or charities local to the Company's operations. Should the Company resume any national corporate social responsibility ("CSR") programme in Ukraine, the Board will ensure adherence to the highest standards of diligence, oversight, governance and reporting.

New board appointments

In 2019, I was pleased to make a number of appointments to the Board which I feel significantly strengthen our team. As part of the selection process, a wide range of factors were taken into consideration, including requirements for diversity, mining sector experience and emerging market knowledge. I now feel that, subject to one further appointment which is in progress, we have the right mix of skills on the Ferrexpo Board.

In February, we announced the appointment of Lucio Genovese as a Non-independent Non-executive Director. Lucio has been involved in the mining and commodities industry for over 30 years. He has deep knowledge across the sector, including in iron ore. He has extensive experience of operating in emerging markets, specifically in Russia and the CIS states. As a previous Board member (from 2007 to 2014) and, as a Board member of Ferrexpo AG, Lucio has in-depth knowledge of the Group which is extremely valuable to the Board.

In June, Graeme Dacomb joined as an Independent Non-executive Director and as the Chair of the Audit Committee. Graeme was a partner at Ernst & Young for 26 years where, for his last 12 years, he was a lead partner in the extractive industry, responsible for coordinating the provision of a full suite of services to multinational mining and oil and gas clients including Xstrata, Fresnillo and BP across a broad range of countries including emerging markets. In addition to audit services, he provided critical advice to his clients on corporate governance structures, risk management, acquisitions, disposals and financial systems and controls. From 2011 to 2018, Graeme was a member of the Financial Reporting Review Panel.

In August, we announced the appointment of Vitalii Lisovenko as Senior Independent Director and Fiona MacAulay as an Independent Non-executive Director and as Chair of the Remuneration Committee.

Vitalii, who joined the Ferrexpo Board in November 2016, has made a strong contribution to the Board and has deep knowledge of financial markets and the Ukrainian business environment.

Fiona has extensive operational experience in emerging markets in the upstream oil and gas sector, having worked for a number of large multinationals as well as mid and small-sized companies. This includes as CEO of Echo Energy Plc. Fiona is Chair of Independent Oil & Gas Plc where she also chairs the Technical, Health, Safety and Environment and Remuneration Committees. Fiona is also a member of the Exploration Advisory Board of Cairn India, the largest private sector producer of crude oil in India as well as being on the Board of Coro Energy Plc, where she is a member of the Remuneration Committee and chairs the Health, Safety, Environment and Sustainable Committee.

During the year, three directors resigned: Simon Lockett, Mary Reilly and Bert Nacken. I would like to thank them for their contributions to the Company.

In October 2019, Kostyantyn Zhevago informed the Board of his decision to step aside, temporarily, from his position of Chief Executive Officer of the Group to focus on resolving certain matters in Ukraine relating to one of the businesses he owned until 2015.

The Board, including Kostyantyn, believes that this temporary change of leadership was necessary and in the interests of all shareholders to enable him to focus on these matters in Ukraine without impacting the Company's operations. Kostyantyn remains on the Board as a Non-independent Non-executive Director and has the full support of the Board.

We were very pleased that Chris Mawe agreed to step into the role of Acting Chief Executive Officer. His extensive knowledge of the Group's operations will ensure business continuity.

As a result of Chris becoming Acting Chief Executive Officer, Roman Palyvoda was appointed Acting Chief Financial Officer given his extensive financial experience within the Group. Roman joined Ferrexpo in September 2008 in a senior financial role. Previously, Roman worked at Renault Group for over five years, latterly as the Financial Controller for Russia, Ukraine and the CIS.

The Group has a strong executive management team with a track record of delivering the Group's strategic objectives. In addition, many of the senior management team have been with the Group for at least ten years, further adding stability during volatile times.

Last but not least, Ferrexpo acknowledges the need for diversity in its Board, management and employee structures. A programme to deliver our diversity objectives is ongoing.

Auditor appointment

In July 2019, Ferrexpo announced that following the completion of an audit tender led by the Company's Audit Committee, MHA MacIntyre Hudson, the UK member of Baker Tilly International, was appointed as the Company's new auditor. Baker Tilly International operates one of the top ten audit networks in the world and, importantly, has significant audit capability in Ukraine having operated there since 1999.

Purpose, Values and Strategy

Our purpose is to produce and market premium quality iron ore pellets, vital for sustainable steel production essential to modern life. Our values underpin our purpose and culture.

In summary, these values are to Act Responsibly, Make it Happen, Integrity in What We Do, Diversity within One Team and Continuous Innovation. These values were first defined at the Group's leadership conference in Kyiv in October 2017 and were subsequently refined and approved by the Executive Management Team and the Board. Our strategic priorities are: to produce high quality pellets, be a low cost producer, sell to a world class customer portfolio, maintain a social licence to operate and to maintain appropriate capital allocation between a strong balance sheet, returns to shareholders and investment for growth.

Safety and responsibility is our number one priority and the Board is strongly focused on ensuring that it is embedded in everything we do.

Ferrexpo has a unique culture that is very focused on collaboration especially when the Group is impacted by external factors, such as the current coronavirus epidemic. I'm proud to say that our team is hardworking and conscientious and works tirelessly for the good of the Group. We all very much believe in the value Ferrexpo adds to all stakeholders and to Ukraine. Our decisions are for the long term and ensure a sustainable future for all.

Alongside our culture and values we have a Code of Business Conduct, available on our website at www.ferrexpo.com, which sets out the specific standards of conduct that we all commit to meet.

We also expect our suppliers to adhere to our standards of conduct. All suppliers are expected to comply with our anti-bribery and anti-corruption policy, and to our Code of Conduct which commits them to appropriate ethical and human rights standards,

including anti-slavery.

The Board monitors culture in a number of ways so that it is in alignment with our Purpose, Values and Strategy, including site visits and interacting with management and employees as part of our duties. We also review a number of cultural indicators from employee surveys as well as accident statistics, internal audit reports and whistleblowing data, which is collected via an independently managed hotline.

Workforce engagement

Workforce engagement as set out by the 2018 Corporate Governance Code, is managed via the Board and executive management. The Board took the view that the most appropriate way to achieve meaningful and effective engagement with the workforce was through the CSR Committee, a sub-committee of the Board. As most of these CSR members are based in Ukraine and engage with the community and workforce on a daily basis the Board considered this method to be the most appropriate.

In order to fully understand employee views a survey consisting of 45 questions was developed to understand opinions on strategy alignment, Group culture, employee development, reward and recognition, team work and integration, effectiveness of leadership and areas on accountability and performance. The survey elicited a good response with over 50% of total employees participating (or 4,769 employees across our worldwide operations).

The results of the survey were fed back and considered by the Board in July 2019 as well as to 60 of the Group's top leaders at a leadership conference in Kyiv in September 2019 and representatives of the workforces who were tasked with distributing the information.

In October 2019, a town hall session was held at Horishni Plavni (the main town surrounding our mines) with over 245 members of the workforce attending. Senior management in attendance included Jim North (Group Chief Operating Officer), Viktor Lotous (Head of Managing Board, FPM), Nikolay Goroshko (General Director of FYM), Yuriy Khimich (General Director of FBM) and Greg Nortje (Group Chief Human Resource Officer), as well as Vitalii Lisovenko (Senior Independent Director). The session was two hours long and members of the workforce had the opportunity to raise questions and bring any matters to the attention of the senior management. The results of the questions have subsequently been analysed and each functional head in the business has been tasked to identify areas of improvement and to build on strengths with their colleagues. It is our intention to monitor these action plans and assess their effectiveness on an annual basis.

Iron ore pellet market

In 2019, steel demand was muted in some regions, particularly in the second half of the year, reflecting increased raw material costs and weaker end-user demand. The Group, however, had the ability to deploy product to other markets to offset any regional weakness. Overall, the price the Group received for its pellets remained attractive compared to historic levels.

Capital allocation

The Group is committed to maintaining low net debt, paying dividends to shareholders and allocating capital to incremental investments with high internal rates of return with the aim to sustainably increase output. We maintain a strong focus on liquidity especially during the current very uncertain business climate.

Ferrexpo people

I would like to thank all of Ferrexpo's workforce, the senior management team and our Board members. Their hard work and determination to overcome challenges this year have once again proven our resilience and our ability to stay focused when it is needed most. This underpins our Purpose and Values as a Group and secures the long-term future for all.

I would also like to say a special thanks to Nikolay Petrovich Goroshko who retired as the General Director of Ferrexpo Yeristovo Mining on 31 January 2020. Nikolay first joined the Company in 1984 and oversaw the Group's listing in 2007 as the Chief Financial Officer as well as heading the development of Ferrexpo Yeristovo Mine – the first new open pit mine in the former USSR since Independence.

Outlook

During 1Q 2020, COVID-19 began causing disruption to Chinese supply chains impacting the distribution networks of steel producers and their customers. This could result in short-term volatility for the iron ore market as high levels of steel inventory, built up during this period, are released into the supply chain once normal operations resume. Early signs are indicating that the Chinese economy is beginning to recover from the peak of the COVID-19 virus.

The spread of the virus into Europe, however, could result in further economic uncertainty. Prior to the virus, we had expect steel profitability in Europe to show a mild recovery in key markets from the second half of the year onwards.

Incumbent pellet suppliers that have the ability to supply their domestic market and to export will likely switch back to domestic customers in 2020 given lower international pellet premiums compared to 2018. In addition, lower pellet premiums could see some high-cost supply exiting the market.

Ferrexpo remains well placed to manage our way through the current uncertainties, due to our low-cost position relative to our peers, our well-invested asset base, our premium customer portfolio and our strong balance sheet.

Steve Lucas
Chairman

ACTING CHIEF EXECUTIVE'S REVIEW

In October 2019, I was appointed Acting Chief Executive Officer by the Board of Ferrexpo. I joined Ferrexpo in 2008 as Chief Financial Officer and I am pleased to serve as interim CEO to ensure continuity and stability through what has been a challenging 2019.

By focusing on areas within our control, such as completing existing capital projects (to increase our pellet output by 14% to 12 million tonnes of pellet per annum by 2021), continuing to improve our pellet quality and further strengthening our customer relationships, we have further developed the business based on our strengths.

Ferrexpo has always had significant organic growth potential. This potential, however, requires careful consideration in relation to country and iron ore price volatility whilst maintaining a strong balance sheet to ensure a sustainable and prosperous future for all stakeholders. This strategy requires evolution not revolution and sound financial discipline.

The success of this strategy can be measured by our track record of consistent operational performance – total production of 65% Fe pellets has increased by 6.4 million tonnes or by 173% since 2007.

Since 2007, Ferrexpo has generated US\$3.8 billion in free cash flow from operations. Shareholders have received over US\$750 million in dividends, whilst taxes of US\$829 million have been paid to the Ukrainian government and we have invested approximately US\$2.5 billion into our mining, processing and logistics operations, making us one of the largest investors in the country over that period.

I'm very proud to say that Ferrexpo can compete with the best peers in the world. I would like to express my sincere gratitude to the executive management team and workforce for their full support during this temporary period.

Chris Mawe
Acting CEO

FINANCIAL REVIEW

Summary

Group revenue and profit before tax increased by 18% in 2019 compared with 2018. Strong cash flow generation, up 62% year on year, funded dividend payments of US\$155 million and capital investment of US\$247 million, an increase in investment of 83%, whilst net debt reduced by 17% to US\$281 million.

Revenue

Group revenue increased by 18% to US\$1.5 billion in 2019 (2018: US\$1.3 billion), principally due to a 17% increase in Ferrexpo's realised free on board ("FOB") price and an increase in pellet sales volumes. Higher realised prices during the period mainly reflected a significant increase in the iron ore fines price.

In 2019, the 62% Fe iron ore fines price increased 35% from an average of US\$69 per tonne to US\$93 per tonne. This increased revenue by US\$246 million. During the year, in line with the industry, Ferrexpo progressively switched to pellet pricing based off the 65% Fe fines index rather than the 62% Fe fines index, reflecting the higher iron content of its pellets.

Following the switch to the 65% Fe fines index, the average realised pellet premium in 1H 2019 was in line with the average of 2018.

However, a fall in long-term customer pellet premiums in 4Q 2019 and a corresponding increase in spot sales to China, reduced the average weighted pellet premium for the year by 12% compared with the average 2018 level. This decreased revenue by US\$73 million. *For further information see Market Review on page 14.*

Ferrexpo's agreed sales prices are based on a variety of reference periods, ranging from the average iron ore fines price for a month to a quarterly lag. In 2019, this difference in timing had a positive effect on sales increasing revenue by US\$19 million compared to 2018.

Seaborne freight revenue arising from CFR sales increased revenue by US\$25 million compared to 2018. This reflected a higher proportion of sales to Asia.

Sales volumes for the period increased to 10.3 million tonnes (2018: 10.2 million tonnes), increasing revenue by US\$10 million. *For further information see Operations Review – Marketing on page 17.*

Lastly, the Group's barging operations increased revenue by US\$5 million in 2019 compared with 2018.

Costs

C1 Cost of production

The Group's average C1 cash cost of production^A was US\$47.8 per tonne in 2019 compared with US\$43.3 per tonne in 2018.

The increase in costs was primarily due to domestic cost inflation and a strong local currency against the US Dollar. Together these factors added US\$2.5 per tonne to the C1 cash cost compared to 2018, reflecting Ukrainian inflation of 4% while the Hryvnia appreciated 14% against the US Dollar during the year. Over half of the Group's operating costs are in local currency and are impacted by the Hryvnia exchange rate and inflation.

For further information see Currency on page 11.

Repair and maintenance costs increased by US\$2.0 per tonne in 2019. This expenditure was primarily focused on fleet truck repairs.

An improvement in consumption norms offset the majority of commodity cost increases during the year.

In 2020, the Group expects royalties to increase by approximately US\$1 per tonne due to new royalty tax legislation expected to be adopted in March 2020, impacting the Group from 2Q 2020.

The Group's C1 cost represents the cash costs of production of iron pellets from own ore (to the mine gate), divided by production volume from own ore, and excludes non-cash costs such as depreciation, pension costs and inventory movements, also the costs of purchased ore, concentrate and gravel.

The C1 cash cost of production (US\$ per tonne) is regarded as an Alternative Performance Measure ("APM"). For further information see page 55.

Selling and distribution costs

Total selling and distribution costs were US\$294 million (2018: US\$260 million). This included an increase in rail tariffs of 15% from April 2019. International freight costs arising from CFR sales increased by US\$25 million compared to 2018; this figure is also included in revenue.

General, administrative and other expenses

General and administrative and other expenses was US\$66 million compared with US\$45 million in 2018. This reflected an increase in local personnel costs due to the appreciation of the local currency against the US Dollar and higher audit and professional fees as a result of the independent review into the Blooming Land Charity. *For further information see Principal Risk 1 on page 22 and Note 14 Contingencies to the Consolidated Financial Statements.*

Currency

Ferrexpo prepares its accounts in US Dollars. The functional currency of the Group's operations in Ukraine is the Hryvnia, which represents approximately half of the Group's operating costs. In 2019, the Hryvnia appreciated 14% from UAH27.688 per US Dollar on 1 January to UAH23.686 per US Dollar as of 31 December 2019. *For further information see C1 Cost of Production on page 10.*

Local balances as of 31 December 2019 are converted into the Group's reporting currency at the prevailing exchange rate. The appreciation of the Hryvnia resulted in a US\$265 million increase in net assets in 2019 (2018: increase of US\$12.1 million), as reflected in the translation reserve.

Table 1: Ukrainian Hryvnia vs. US Dollar

	Spot 16.03.20	Opening rate 01.01.19	Closing rate 31.12.19	Average 2019	Average 2018
UAH per US\$	26.596	27.688	23.686	25.846	27.200

Source: National Bank of Ukraine

Operating foreign exchange gains/ losses

Given that the functional currency of the Ukrainian subsidiaries is the Hryvnia, an appreciation of the Hryvnia against the US Dollar results in foreign exchange losses on the subsidiaries' US Dollar denominated receivable balances (from the sale of pellets). The operating foreign exchange loss in 2019 was US\$46.8 million compared to a loss of US\$5.3 million in 2018.

Non-operating foreign exchange gains/ losses

Non-operating foreign exchange losses are mainly due to the conversion of UAH denominated intercompany payable balances and the conversion of Euro denominated loans (at the Group's barging facility) into the functional currency of the respective Group's subsidiary. The increase of the non-operating foreign exchange losses to US\$18.5 million (2018: US\$1.6 million) was driven by a 14% appreciation of the Hryvnia during the year against the US dollar and the change in the Euro/US Dollar exchange rate. *For further information see Note 6 to the Consolidated Financial Statements.*

Underlying EBITDA^A

Underlying EBITDA^A in 2019 increased 17% to US\$586 million compared to US\$503 million in 2018.

This reflected a 17% increase in the Group's received pellet price-contributing US\$246 million to Group revenue compared to 2018 together with higher sales volumes contributing US\$10 million. This was partially offset by an increase of US\$47 million in the cash cost of production, higher selling and distribution expenditure of US\$12 million, an increase in other of US\$10 million and a non-cash operating forex loss of US\$47 million.

Interest

Interest expense on loans and borrowings declined 23% to US\$34 million compared to US\$43 million in 2018 due to a lower outstanding debt balance and final repayment of higher cost Eurobonds in April 2019. The average cost of debt for the period ended 31 December 2019 was 7.0% (average 31 December 2018: 8.2%). The decrease was due to the repayment of US\$173 million 10.375% Eurobonds.

Further details on finance expense are disclosed in Note 7 Net finance expense to the Consolidated Financial Statements.

Tax

In 2019, the Group's tax expense was US\$56 million (2018: US\$57 million). The effective tax rate for 2019 was 12.2% (2018: 14.5%). This reflected the appreciation of the Ukrainian Hryvnia against the US Dollar, negatively impacting the profitability of the Group's local subsidiaries, as well as lower global pellet premiums compared with 2018. The effective tax rate in 2018 reflected strong pellet premiums in the Chinese spot market.

In 2019, the Group paid income taxes of US\$84 million (2018: US\$44 million), of which US\$73 million were paid in Ukraine (2018: US\$36 million).

Further details on taxation are disclosed in Note 8 Taxation to the Consolidated Financial Statements.

Profit for the period

Profit for the period increased 20% to US\$403 million compared with US\$335 million in 2018, reflecting a 16% increase in operating profit and lower net financial expense, offset by a non-operating foreign exchange loss of US\$18.5 million (2018: loss of US\$1.6 million).

Cash Flows

Operating cash flow before working capital increased 26% while the working capital outflow in 2019 was US\$30 million compared to an outflow of US\$116 million in 2018. The decrease in working capital largely reflected a 58% reduction in inventory build of stockpiled ore due to the redesign of the FPM pit. Low grade ore that was stockpiled in prior years will be processed once the Group increases its beneficiation capacity to 12 million tonnes per annum (expected to be in 2021). Higher pricing in 2019 and a strong sales month in December 2019 compared to December 2018 increased trade receivables. As a result of the higher operating cash flow and the lower net working capital outflow, the net cash flow from operating activities increased 62% to US\$473 million in 2019 (2018: US\$292 million).

Capital investment was US\$247 million, an increase of 83% compared to 2018 (US\$135 million), while dividends paid increased 60% to US\$155 million compared to US\$97 million in 2018.

Capital investment^A

Capital expenditure in 2019 was US\$247 million compared to US\$135 million in 2018. Of this, US\$102 million was sustaining and modernisation capex (2018: US\$66 million) at FPM. As in 2018, sustaining capex also included a substantial refurbishment of one of the Group's four pellet lines during the period.

Investment at FYM of US\$46 million (2018: US\$32 million) included capitalised stripping, drill automation and development of a spare parts warehouse for the Group as part of the integration of certain key functions between the Group's operations.

Investment in FPM's Concentrate Expansion Programme ("CEP 1") was US\$34 million (2018: US\$24 million). The project remains on track for completion by the end of 2020 and is expected to increase pellet production by 1.5 million tonnes per annum in 2021. FPM also spent US\$22 million on phase 1 of its press filtration project during the year.

Ferrexpo invested US\$11 million (2018: US\$4 million) in the development and exploration of the Belanovo, Galeschyno and the Northern Deposits.

The Group acquired 600 rail cars in 2019 for approximately US\$26 million (2018: US\$3 million). While it invested approximately US\$4 million of sustaining capex at its logistics company in Austria in 2019 (2018: US\$5 million).

Ferrexpo continues engineering studies to expand its pelletising capacity above its current nameplate capacity of 12 million tonnes per annum towards 20 million tonnes per annum.

For further information on Capital investment see page 21.

Dividends

Total dividends declared for the 2019 financial year amount to 13.2 US cents per share (2018: 23.1 US cents per share). The Board is committed to dividends and intends to consider a potential final ordinary and/or special dividend for the 2019 financial year once the general market situation and the effect of the COVID-19 virus has become clearer. Overall, in 2019 the Group paid out dividends of US\$155 million, a 60% increase compared to 2018 (US\$97 million), and has paid US\$40 million so far in 2020.

Debt and debt maturity profile

Ferrexpo has a strong balance sheet with low levels of debt. Net debt to underlying EBITDA^A for the last 12 months was 0.48x compared with 0.67x as of 31 December 2018. Net debt as of 31 December 2019 was US\$281 million, down 17% compared to 31 December 2018 (US\$339 million). This included a US\$68 million increase in cash to US\$131 million (31 December 2018 cash: US\$63 million).

Gross debt as of 31 December 2019 was US\$412 million compared with US\$402 million as of 31 December 2018. Of this, US\$7 million was as a result of the first-time application of IFRS 16 Leases.

The Group has a US\$400 million 2017 PXF facility which will amortise over 12 quarters (US\$33 million per quarter) commencing 1Q 2020. The Group has other facilities of US\$5 million which mostly relate to export credit agency funding which will amortise

monthly over the next 18 months.

Ferrexpo may consider extending its debt maturity profile in 2020 using the PXF market or other debt capital markets.

During the year, Ferrexpo's long-term corporate and debt rating was upgraded by Fitch to BB- (an upgrade of one notch) with a stable outlook. The rating is capped at the maximum level above Ukraine's Sovereign rating.

Related party transactions

The Group enters into arm's length transactions with entities under the common control of, Kostyantyn Zhevago, a controlling shareholder of the Group. For further information see Note [15] Related party disclosure to the Consolidated Financial Statements.

Management of the Group has recently received information that FC Vorskla (a related party of the Group) provided a loan, which as of 31 December 2019 was approximately US\$17 million, to another related party, Collaton Limited, which is controlled by Kostyantyn Zhevago.

MARKET REVIEW

Summary of iron ore market in 2019

A significant supply deficit emerged in the first half of 2019 due to the tragic tailings dam accident in Brazil in January and poor weather conditions in Australia and Brazil during most of the period. This coincided with strong steel production in China with Chinese output rising 10% compared to first half 2018.

Prices responded accordingly and the 62% Fe fines price rose US\$45 per tonne to an average first half 2019 price of US\$91 per tonne and traded above US\$125 per tonne for the first time since 2014.

In the second half of the year, steel production from Europe and North Asia declined due to weak industrial production and significantly lower profitability given higher input costs. As such, steel mills looked to reduce production through lower productivity or by idling blast furnaces.

Following weather-related supply weakness in the first half of 2019, iron ore supply recovered from Brazil and Australia in the second half of the year. As a result, the benchmark 62% Fe fines price corrected from August reaching a low of US\$80 per tonne in November.

Overall, reduced steel mill capacity utilisation led to increased demand for lower quality ore and the price premium between high grade 65% Fe ore and 62% Fe ore narrowed to an average of US\$11 per tonne in 2019 from US\$21 per tonne in 2018.

Iron ore pellets in 2019

In the first half of 2019, the supply of pellets to the global export market reduced by 11 million tonnes, or by 8%, due to the major supply disruptions in Brazil. This underpinned a near all-time high for pellet premiums in the first nine months of the year – the Platts Atlantic pellet premium (which remains based off the 62% Fe fines price) averaged US\$61 per tonne in first half 2019. From the fourth quarter of 2019, the Platts Atlantic pellet premium fell to an average of US\$37 per tonne as steel mills looked to economise and reduce losses.

Overall in 2019, the total pellet export market declined by 3% to 135 million tonnes vs. 140 million tonnes in 2018.

Table 2: *Global pellet exporters* shows the market share of the top pellet exporters in 2019 compared with 2018. Production from Brazil declined by 26% due to the tailings dam accident and resulting constraints on wet processing and tailings storage. Production from Sweden also declined while there was a strong increase in production from Russia, India and Iran as local producers switched sales from domestic markets to international markets to take advantage of higher pellet premiums.

Table 2: Global pellet exporters (million tonnes)

		2019	2018	%	2019 Mkt share	2018 Mkt share
Vale – Group	Brazil, Oman	32.7	44.1	-26%	24%	32%
LKAB	Sweden	16.3	18.8	-13%	12%	13%
Ferrexpo	Ukraine	10.3	10.2	+1%	8%	7%
Bahrain Steel	Bahrain	9.1	7.6	+20%	7%	5%
IOC	Canada	8.9	8.3	+7%	7%	6%
Metalloinvest	Russia	7.2	4.2	+71%	5%	3%
US Steel	USA	7.0	5.3	+32%	5%	4%
QCM	Canada	6.5	5.6	+16%	5%	4%
Cliffs	USA	4.7	5.0	-6%	3%	4%
Metinvest	Ukraine	5.0	5.4	-7%	4%	4%
Severstal	Russia	3.8	5.5	-31%	3%	4%
BRPL	India	3.0	2.0	+50%	2%	1%
JSPL	India	2.2	1.6	+38%	2%	1%
Grange	Australia	2.3	2.1	+10%	2%	2%
KIOCL	India	2.1	1.5	+40%	2%	1%
CMP	Chile	0.2	3.0	-93%	0%	2%
Subtotal		121.3	130.2	-7%	90%	93%
Other	Iran, Venezuela, India, CIS	13.7	9.4	+46%	10%	7%
Subtotal		135.0	139.6	-3%		

Source: CRU, Market Outlook January 2020, Company

Average ore burden mix to produce hot metal

In 2019, according to CRU, China increased pellet imports by 63% from 19 million tonnes to 31 million tonnes. As a result, China became the second largest importer of pellets behind Europe which imported 34 million tonnes (2018: 39 million tonnes). This reflected a strong increase in supply of pellets to China during the year and higher profit margins of steel producers in China compared to European steel producers. It also reflected requirements to reduce environmental emissions and an increasing requirement to use higher quality ore to produce more sophisticated steel products.

Traditional pellet markets in 2019 (Europe, Japan, South Korea, Taiwan) witnessed a reduction in pellet consumption compared with 2018, reflecting lower pellet availability in the first half of 2019 and challenges in their steel markets due to higher cost inputs and weaker end user demand.

Table 3: *Average ore burden mix to produce hot metal* reflects the above switch, with Europe increasing consumption of sinter and reducing pellet consumption which was partially offset by an increase in pellet consumption in China.

Table 3: Average ore burden mix to produce hot metal

	Sinter (2019)	Sinter (2018)	Lump (2019)	Lump (2018)	Pellets (2019)	Pellets (2018)
EU 28	64%	58%	10%	8%	26%	34%
China	78%	79%	10%	11%	12%	10%
Japan	66%	66%	22%	21%	12%	13%
South Korea	70%	70%	24%	21%	6%	9%

Source: CRU, Market Outlook January 2020

Pellet premiums and the pelletising cost curve

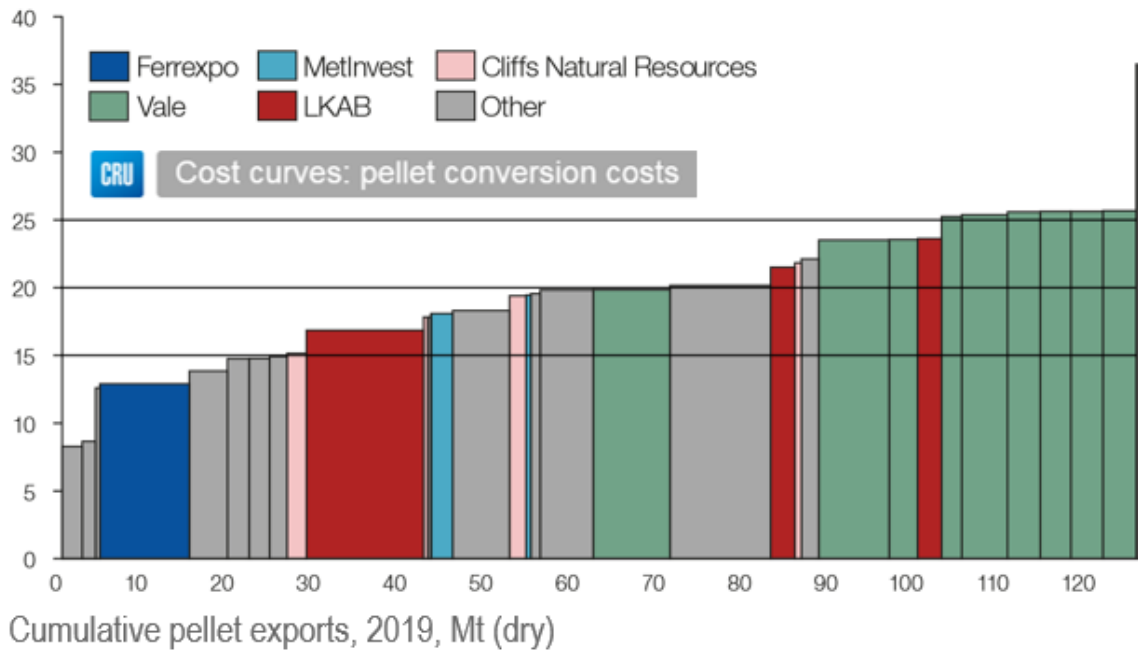
Graph 1: *Export Cost Curve of Converting Concentrate to Pellet*, shows the cost to pelletise beneficiated ore. The pellet premium determines which pellet producers can sustain production in a lower pellet premium environment.

In 2019, the average Platts Atlantic pellet premium of US\$59 per tonne supported global production. The Chinese spot pellet premium, however, was more volatile falling to approximately US\$16 per tonne in September 2019 (see graph 2: *Monthly average Chinese spot pellet premium 2019*). The Chinese market tends to act as the market of last resort for exporters. At these levels, and if demand elsewhere is weak, a significant proportion of exporters would have been loss making (as can be seen from graph 1), and historically supply has exited the market around these levels.

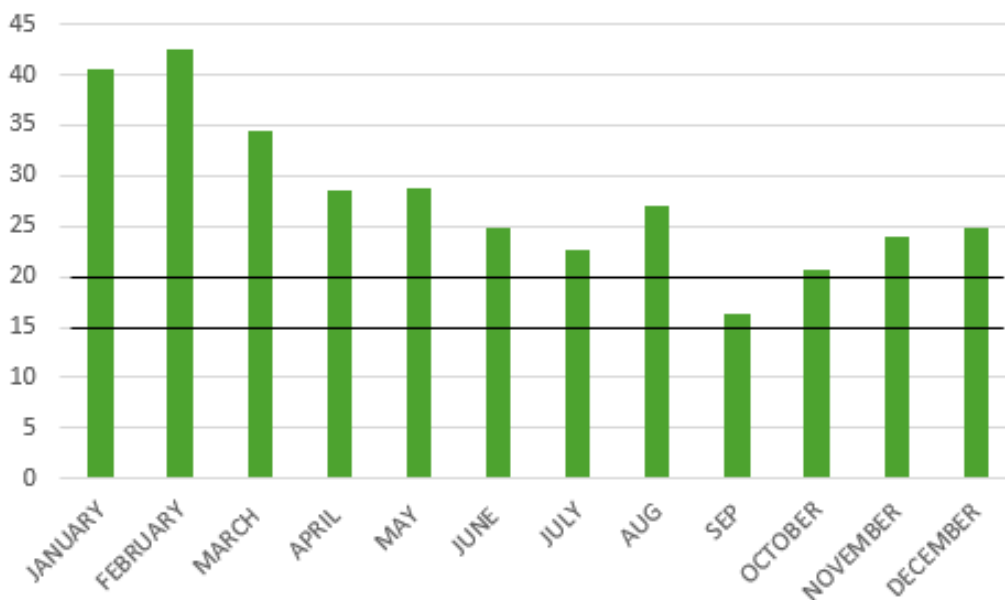
Ferrexpo believes that the structure of the pelletising cost curve (shown on graph 1) should support pellet premiums in 2020 and over the medium to long term.

As can be seen from graph 1, Ferrexpo is a low cost pellet producer which supports its cash generation through the cycle.

Graph 1: Pelletising conversion costs from pellet feed to pellet, 2019, ex-works, US\$/dmt



Graph 2: Monthly Average Chinese Spot Pellet Premium in 2019, US\$/tonne



2020 pellet outlook

High barriers to entry, especially given relatively low pellet premiums, are unlikely to incentivise new pellet supply in 2020. Incumbent producers can balance supply by switching production from blast furnace to direct reduction pellets or from international export to domestic consumption. In 2020, pellet seaborne supply should not increase due to international prices moderating to historical levels and continued supply issues from Brazil. An extended period of low pellet premiums could result in some capacity reduction for producers with high pellet conversion costs.

At the end of 2019, industry levels of pellet stocks were higher than the historical average and it may take some time for the market to absorb these, especially taking into account the impact of the COVID-19 virus. This could prevent pellet premiums from rising in the short term.

OPERATIONS REVIEW

Marketing

Total sales volumes in 2019 were 10.3 million tonnes (2018: 10.2 million tonnes) with the Group's premium 65% Fe pellet representing 96% of total pellet output during the year (2018: 94%).

Table 4 below shows the breakdown of sales by key market regions. Sales to China and South East Asia include sales to Vietnam and Taiwan.

Table 4: Sales Volume by Market Region

	2019	2018
Central Europe	36%	47%
North East Asia	16%	17%
Western Europe	13%	16%
China and South East Asia	30%	13%
Turkey, Middle East, India	5%	6%
North America	–	1%
Total sales volume (million tonnes)	10,312	10,227

Ferrexpo benefits from a diversified sales portfolio with leading steel mills throughout the world, while its logistics routes to customers provide a competitive advantage given Ukraine's central geographic location. Ferrexpo's average shipping duration to Asia is 30 days compared to its main pellet-producing competitors in Brazil (40 days), Canada (55 days) and Scandinavia (50 days). Ferrexpo is also very competitively placed in terms of shipment days to Europe and Turkey. This ensures that weakness in one region, can be compensated by sales into other regions.

Production

Health and Safety

Ferrexpo is pleased to report that there were no fatalities in 2019 (2018: one) and that it recorded its lowest lost time injury frequency rate ("LTIFR") since listing in 2007.

Table 5: Lost Time Injury Frequency Rate (including employees and contractors)

	2019	2018
– FPM	0.57	1.25
– FYM	0.00	0.66
– FBM	0.00	0.00
Mining entities	0.57	1.15
Barging	0.91	1.83
Group	0.58	1.18

The Group has been focused on developing a preventative approach to safety based on an understanding of high potential risk areas across the business, and taking actions to mitigate these risks. In recent years, Ferrexpo has focused on improving reporting of near-miss events without injury, referred to as serious incident reports, to understand the causes of such events. Together with improved risk assessments, this reporting is helping to reduce the number of injuries incurred.

Ferrexpo will continue to improve and adapt its safety practices. Efforts in 2020 are set to focus on contractor training, to ensure the correct safety policies and procedures are adhered to at site, as well as ensuring that contractors maintain the Group's high standards in their personal protective equipment. An analysis of incidents in 2019 revealed three key areas for future improvement: managing activities in close proximity to rotating equipment, transportation of employees and employee walkways.

In the first half of 2019, overall long-term customer performance was in line with contract agreements and no volumes were sold into the Chinese spot market. In the second half of the year, weakness in Europe (as previously discussed on pages 14-15 in the Market Review) saw volumes increase to China, a majority of which were sold on the spot market.

Despite periods of regional weakness through the year, the Group was pleased to renew and/or extend several key long-term contracts as well as secure a new long-term contract with a leading German steel mill.

The Group's pricing formula for its long-term contracts is based on a spot index iron ore fines price. In 2019, this was a 65% Fe index while in 2018, and in prior years, this was the 62% Fe index, plus a negotiated pellet premium and an adjustment for the cost of international freight, typically the C3 index.

Spot market sales to China are also made on the 65% Fe iron ore fines price plus the prevailing Chinese spot pellet premium. The Chinese spot pellet premium can vary significantly from negotiated long-term contract pellet premiums.

Long-term sales contracts are typically of two to five years' duration although the Group has sales contracts of varying tenors up to 13 years. In general, a small proportion of uncommitted volume is maintained for: (1) new customer development; (2) adjusting for production variations; and (3) opportunistic spot sales.

For further information on sales see Revenue in the Financial Review on page 10 and Market Review on page 14.

Reserves and Resources

Ferrexpo has updated its Reserve and Resource statement for its Gorishne-Plavninske-Lavrykivske ("GPL") and Yerystivske projects. As a result, total JORC reserves have increased to 1.6 billion tonnes (from 1.3 billion tonnes) and total resources have decreased to 5.7 billion tonnes (from 6.5 billion tonnes). There has been a notable increase in the Fe magnetic content of GPL's reserve and resource base (see below).

These statements are prepared in accordance with the guidelines set out in the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 edition). At current production rates, the Group has enough reserves for the next 55 years of production. The changes compared to the Group's previous Reserve and Resource statement are as follows:

JORC Reserves

- 285 million tonnes increase in Proved Reserves
- 72 million tonnes increase in Probable Reserves
- Overall the Group's total JORC classified reserves have increased by 357 million tonnes to 1.6 billion tonnes
- GPL, the area or reserve mined by FPM, has seen an increase in its Proved Reserves Fe total content from 27% to 33% and an increase in its Fe magnetic from 17% to 26%.

Table 6: JORC Reserve Statement as of 1 January 2020

Deposit	Proved, Mt	Fe total, %	Fe magnetic, %	Probable, Mt	Fe total, %	Fe magnetic, %
Gorishne- Plavninske- Lavrykivske ("GPL")	403	33	26	718	31	23
Yerystivske	227	34	27	281	33	26
JORC reserves	630	33	26	999	32	24

JORC Resources

- 328 million tonnes increase in Measured Resources
- 454 million tonnes decrease in Indicated Resources
- 696 million tonnes decrease in Inferred Resources
- Overall the Group's total JORC classified resources have decreased by 822 million tonnes to 5.7 billion tonnes
- GPL has seen an increase in its Fe total content from 30% to 33% and an increase in its Fe magnetic from 20% to 25%.

Table 7. JORC Resource Statements as at 1 January 2020

Deposit	Measured, Mt	Fe total, %	Fe mag, %	Indicated, Mt	Fe total, %	Fe mag, %	Inferred, Mt	Fe total, %	Fe mag, %
Gorishne- Plavninske- Lavrykivske ("GPL")	567	33	25	1,217	31	23	704	31	23
Yerystivske	254	34	27	524	33	26	402	33	25
Bilanivske	336	31	24	1,149	31	23	217	30	21
Galeschynske	-	-	-	268	55	-	58	55	-
JORC Resources	1,157	33	25	3,158	33	22	1,381	32	22

Pellet production

Pellet production from own ore was in line with 2018 at 10.5 million tonnes. Overall, production levels were impacted by constraints in the processing and pelletising plants. FPM completed a planned 58-day pellet line refurbishment in 4Q 2019. This marks the completion of a refurbishment programme to its four pellet lines.

Once the Group's current capital projects are completed, which includes de-bottlenecking the concentrator and building a concentrate stockyard, FPM expects to produce enough pellet feed to ensure its pelletiser can operate at full capacity of 12 million tonnes per annum. *See Capital Investment on page 21.*

Iron ore processed in 2019 increased 5%, this underpinned a 3% increase in 65% Fe pellet volumes to 10.1 million tonnes or 96% of total production - a record percentage of production for the Group.

Due to the refurbishment of the Group's final pellet line in 4Q 2019, the Group ended the year with 186 thousand tonnes of concentrate.

Mining and production efficiencies

The Group has continued to implement initiatives which contribute to cost savings, efficiency improvements and enhanced health and safety standards.

The Group's excavator rates have benefited from the transition to 100% liquid emulsion in the Company's blasting operations. This has improved the fragmentation of blasted rock, resulting in improved excavator efficiencies and reduced waiting time for haul trucks. In addition, an improved mine design at FPM has led to improved cycle times for haul trucks.

The first stage of implementation of FYM's automated drill rigs has been completed, and drills are now operated by tele remote mode from the Group's centralised mine control room. Use of drones to survey the pit area has also been implemented at FYM.

Consolidation of FPM's and FYM's mining and mobile maintenance activities into one organisation has continued and will be completed in 2020. As such, all maintenance activities for mining will be carried out by one team to optimise the use of resources and improve fleet availability.

Lastly, it is encouraging to note that gas consumed per pellet produced has fallen 34% since the Group's IPO in 2007 from 18,440 m³ per tonne to 12,118 m³ per tonne in 2019. This is as a result of better heat recuperation from recycling exhaust gases and the increased use of sunflower husks in the Group's pelletisers.

Ferrexpo will continue to implement small-scale projects aimed at improving productivity and efficiency to reduce operating costs.

CO₂ emissions

Table 8: CO₂ Emissions

	2019	2018	Change
CO ₂ emissions (tonnes)	2,624,280	2,605,082	0.7%
Scope 1 (direct) (tonnes)	579,415	588,781	-1.6%
Scope 2 (indirect) (tonnes)	1,940,551	1,925,670	0.8%
Pellets produced (tonnes, 000s)	10,519	10,607	-0.8%
Intensity ratio (kilogramme per tonne of pellet produced)	240	237	1.2%
Biofuels (reported separately) (tonnes)	104,313	90,631	15.1%

Note: 2018 numbers have been restated due to the adoption of GHG Protocol emissions factors in this report (see above) and this has resulted in an increase in the 2018 intensity ratio from 235 to 237 per kilogramme per tonne of pellet produced.

CO₂ emissions

Overall emissions of greenhouse gases in 2019 remained in line with 2018, with the 1% increase in electricity consumption the principal driver behind the Group's overall emissions intensity ratio increasing from 237 in 2018 to 240 kilogrammes of CO₂ emissions per tonne of pellets produced in 2019. The increase in electricity consumption is due to the 5% increase in tonnes of ore processed. Electricity accounts for approximately 75% of the Group's greenhouse gas emissions, due to the large component of coal fired power stations that contribute to Ukraine's national grid. Ferrexpo is considering reducing its reliance on electricity from the national grid with solar power, by installing a 5MW pilot plant on the southern extent of FPM's waste dumps. If the pilot project is approved and proves successful, it is envisaged that the Group will expand the use of solar power which could have significant savings in terms of operating cost and Ferrexpo's Scope 2 greenhouse gas emissions.

Scope 1 emissions relate to emissions directly produced through the Group's own activities in Ukraine, such as diesel consumption in mining vehicles. Scope 2 emissions are those that are generated by third parties in the supply of electricity and heat (steam) to the Group's operations.

For the first time, Ferrexpo is publishing an estimate of its downstream Scope 3 emissions. Downstream Scope 3 emissions represent the emissions from upstream and downstream activities that relate to the distribution and use of the Group's pellets. Ferrexpo's total Scope 3 emissions in 2019 are estimated to be 10.0Mt (2018: 9.9Mt), or the equivalent of 0.95 tonnes of CO₂-equivalent per tonne of pellets produced (2018: 0.94 tonnes of CO₂ equivalent per tonne of pellets produced). Ferrexpo's calculation of its Scope 3 emissions utilises independent research by CRU for the allocation of emissions by steel mills in their conversion of Ferrexpo's pellets to metal³. This research shows that steel mills produce 38% less greenhouse gas if they use Ferrexpo's magnetite iron ore pellets instead of the more commonly used iron ore fines, which requires sintering with coking coal before being charged to the blast furnace. This saving of Scope 3 greenhouse gases at the steel mill far exceeds the additional greenhouse gases produced in Ferrexpo's processing and pelletising magnetite ores in Ukraine. As the Group's understanding of its Scope 3 emissions increases, the intention is to add upstream activities, such as goods purchased and business travel, to the Company's Scope 3 estimate.

In 2019, the Group has adopted the standards published by the Greenhouse Gas Protocol for the calculation of the Company's Scope 1 emissions. This has resulted in a minor adjustment to the reported emissions for 2018 (as shown in table 8 above), and as a result, the 2018 intensity ratio has increased from 235 to 237 per kilogramme per tonne of pellets produced. Adoption of the Protocol has also enabled Ferrexpo to publish figures that include emissions of methane (CH₄) and nitrous oxide (N₂O). Whilst emissions of these gases are generally much lower than the volumes of carbon dioxide emitted, the greenhouse effect per tonne emitted is much higher – 25 times more for methane and almost 300 times more for nitrous oxide. Inclusion of these gases helps further standardise Ferrexpo's reporting in line with peers. A major component of Ferrexpo's emissions are through its use of electricity (Scope 2), and the emissions factor for this activity is provided by the European Bank of Reconstruction and Development.

³ CRU Research based on incremental adjustments of pellets and sinter in the burden of a blast furnace of a typical European steel mill. Emissions factor provided is per tonne of hot metal produced and does not account for further processing of steel into flat or long steel products as this depends on the individual customer

Capital investment

The Group's approved capital projects can be seen in table 9. Ferrexpo is on track to reach 12 million tonnes of pellets output per annum by 2021.

Table 9: Approved Capital Projects

Project

Projects to reach 12MTPA	Description	Status	Expected completion	Total cost	Spend FY 2019	Remaining spend
New grinding section	Process 6MTPA of crushed ore into pellet feed	Construction and assembly works underway	2020	US\$41M	US\$8M	US\$5.4M
Concentrate stockyard	Decoupling of concentrator & pellet plant by providing concentrate storage capacity	Construction and assembly works underway	2021	US\$38M	US\$11M	US\$13M
Phase 2 expansion						
Press filtration plant	Replacement of disc filtration to reduce moisture in balling plant	Construction and assembly works underway	Completed in four phases of 6MTPA Final phase completed 2024	US\$115M	US\$22M	US\$92M
Logistics						
Rail cars	Continuation of programme to replace state rail cars. Number of rail cars as of 31 December 2019: 2,850	600 new rail cars delivered in FY 2019	Completed	–	US\$26M	–

The cost to complete the new grinding section in the beneficiation plant has increased by US\$6 million due to labour, equipment and construction material price inflation, exacerbated by the strong Hryvnia compared with the US Dollar. The project is approximately 85% complete and FPM expects to begin commissioning in 3Q 2020.

The concentrate stockyard is approximately 60% complete. Works still to be completed include a thickening area, additional filtration and compression capacity and the load-out area. FPM expects to begin technological commissioning in 2Q 2020 and to complete the loading complex in 1Q 2021. The total cost of the project has increased by US\$14 million due to the finalisation of a more detailed design, especially regarding increased filtration capacity, and cost inflation exacerbated by the strong Hryvnia compared with the US Dollar.

Ferrexpo is currently considering a series of projects which will allow expansion of pellet capacity to 20 million tonnes per annum. This includes further development of the Group's beneficiating capacity, expansion of the Group's pelletising capacity and debottlenecking of logistics infrastructure including rail and port. A preliminary estimate of the required capital investment per tonne is approximately US\$150-US\$200 per tonne of incremental output.

PRINCIPAL RISKS

The principal risks and uncertainties facing Ferrexpo's business as assessed by the Board are listed below.

Principal risks include, but are not limited to, those that could result in events or circumstances that might threaten the Company's business model, future performance, solvency or liquidity and reputation.

Due to the very nature of risk any list cannot be expected to be completely exhaustive. New risks may emerge and the severity or probability associated with known risks may change over time.

The Group has an internal risk register which considers emerging and principal risks related to the business in terms of monetary impact, probability, maximum foreseeable loss, trend and mitigating actions. The risk register is updated monthly and discussed by executive management at the Group's Finance and Risk Management Committee, where the completeness of the risk register is also considered and any new identifiable risks added. The risk register is also discussed and reviewed by the Audit Committee, at least quarterly per year.

The Board of Ferrexpo has ultimate responsibility for the identification of emerging and principal risks and associated strategies to manage and mitigate such risks, and confirms that during the year it carried out a robust assessment of the Company's emerging and principal risks. The Acting Chief Executive Officer, Acting Chief Financial Officer, Chief Operating Officer and Chief Marketing Officer manage specific risks on a day-to-day basis related to their functions.

Ferrexpo operates in the mining industry where there is an inherent level of risk present due to the nature of its operations. In addition, the iron ore fines price (which forms a major component of the Group's received price) is volatile, while the Group's asset base is located in Ukraine, an emerging market. As such, Ferrexpo recognises and accepts the risks present in its business and looks to manage and mitigate them where possible. In 2019, the kinds of risks included on the register were similar to prior years. There was an emergence of some country risk inherent during times of government change. The Group's operations were not materially impacted and Ferrexpo continued to operate successfully. Risks relating to 2020 are discussed below.

1. Country

1.1. Ukraine country risk (external risk)

Transparency International ranks Ukraine as 126th out of 180 countries in terms of the level of perceived corruption (with 180th being regarded as the most corrupt). Ukraine's ranking has deteriorated compared to 2018 where it was ranked 120th. Risks associated with these levels of ranking included counterparties that are involved in activities which are not in compliance with relevant international standards, and a weak judicial system that can be susceptible to outside influences and can take an extended period of time for courts to reach final judgement.

Ongoing conflict and or economic and or political events in Ukraine can constrain Ferrexpo's ability to raise finance. This could impact the Group's ability to repay debt amortisation and could result in lower levels of capital investment (including sustaining capex which could result in lower production levels). General country instability also has negative social and economic consequences and could impact Ferrexpo's ability to operate without disruption in Ukraine. It can also reduce availability of high skilled labour as emigration levels rise.

Kostyantyn Zhevago, a controlling shareholder of Ferrexpo, has a number of other business interests in Ukraine, unconnected to the Group. Developments at these other businesses can inadvertently have a negative impact on Ferrexpo's reputation.

In this regard, a Ukrainian court has placed a restriction covering 50.3% of the shares in Ferrexpo Poltava Mining ("FPM") held by Ferrexpo AG Switzerland, the sole shareholder in FPM. Ferrexpo AG has appealed this court order. The restriction does not affect ownership of the shares but prohibits their transfer. The Group believes this restriction is temporary and is in connection with ongoing matters in Ukraine involving Kostyantyn Zhevago and one of the businesses he owned until 2015. Ferrexpo's operations remain unaffected and continue as normal. Furthermore, Ferrexpo AG has no intention, and never has had any intention, to transfer its shareholding in FPM. The Board of Ferrexpo believes that an appeal should be successful given the advice received that the order has no proper or reasonable basis under Ukrainian law.

During the year the controlling shareholder, Kostyantyn Zhevago, stepped down as CEO in order to resolve certain matters in one of the businesses he previously owned. While this is a separate matter from Ferrexpo, there is a risk that these matters may affect the business due to his 50.3% shareholding.

Mitigation

Ferrexpo operates in accordance with relevant laws and utilises internal and external legal advisers as required to monitor and adapt to legislative changes or challenges.

It maintains a premium listing on the London Stock Exchange and it is currently in compliance with the UK Corporate Governance Code and Market Abuse Regulation.

Ferrexpo has a relationship agreement in place with its controlling shareholder, Kostyantyn Zhevago which stipulates that the majority of Board Directors must be independent. For all related party transactions strict procedures, systems and controls are in place.

Ferrexpo prioritises a strong internal control framework including high standards of compliance and ethics. It operates a centralised compliance structure supported and resourced locally at the Group's operations. Ferrexpo has implemented policies and procedures throughout the Group including training.

Ferrexpo prioritises sufficient total liquidity^A levels and strong credit metrics to ensure smooth operations should geopolitical or economic weakness disrupt the financial system of the country.

Ferrexpo looks to maintain a talented workforce through skills training and by offering competitive wages, taking into account movements of the Hryvnia against the US Dollar and local inflation levels.

Ferrexpo has a high profile given its international client base, its London listing and bank lending from Western financial institutions. Board Directors and relevant senior management are tasked with stakeholder engagement and government relations to communicate the economic contribution that Ferrexpo makes to Ukraine and to show that it operates to world class standards.

1.2. Counter party risk (external risk)

Root cause and impact

Ferrexpo has counterparty exposure through ongoing trading relationships as well as with the Ukrainian government, in many areas including taxation, mining licences to operate as well as other permits. It also has counterparty exposure through state monopolies such as the supply of electricity, gas and freight transportation. Ukraine has a weak credit profile as defined by international credit rating agencies. Financial instability or lack of transparency at Ferrexpo's counterparties could lead to financial loss. This could impact the Group's ability to pay dividends to shareholders, repay debt amortisation and could result in lower levels of capital investment, including sustaining capex which could impact production levels.

In 2019, the Group established an Independent Review Committee ("IRC") to investigate the use of funds donated by Ferrexpo to a Ukrainian charity called Blooming Land. The work of the IRC and its advisers included a forensic review undertaken by BDO LLP, a review of relevant documentation, interviews with Ferrexpo employees and Directors, correspondence with the Blooming Land Charity and other third parties and advice from legal counsel in the UK and Ukraine. The review was unable to conclude that all funds had been spent in accordance with the initial intention, which leaves the Group open to regulatory challenges.

Mitigation

Ferrexpo deals with well-established steel producers that have sound credit profiles.

Ferrexpo's counterparties are subject to regular and thorough review. The results of these reviews are used to determine appropriate levels of exposure, and available alternatives, in order to reduce the potential risk of financial loss.

The Group develops its supplier base in order to avoid excessive dependence on any supplier, actively encouraging a diversity of supply where reasonable and practical.

Companies that would like to work with Ferrexpo are required to undergo an Accreditation Procedure, where their documents, licences and financial stability are checked. In 2019, Ferrexpo added automatic screening and monitoring for sanctions and other risks for counterparties registered in Ukraine. Suppliers that pass accreditation can participate in tenders. Additional checks and further monitoring are required at this stage, including checks for sanctions, adverse media, bribery, use of forced labour, etc.

All supplier contracts must contain the defined set of compliance clauses (related to anti-bribery, sanctions, tax compliance, modern slavery, etc). In 2019, these and other requirements were consolidated into the Business Partners' Code of Conduct, which is now referenced in all contracts.

The Executive Compliance Committee ("ECC"), an executive sub-committee of the Board meets regularly (eight times in 2019), and is charged with ensuring that systems and procedures are in place to comply with laws, regulations and ethical standards. The ECC is attended by the Group Compliance Officer and, as necessary, by the local compliance officers from the operations, who present regular reports and ensure that the ECC is given prior warning of regulatory changes and their implications. The ECC enquires into the ownership of potential suppliers deemed to be "high risk", and oversees the management of conflicts of

interests below Board level and general compliance activities (including under the UK Bribery Act 2010, the Modern Slavery Act, the Criminal Finances Act, and the EU General Data Protection Regulation).

Donations to the Blooming Land Charity were suspended in May 2018, and in August 2019 the Group formally terminated the relationship.

The Board's current policy regarding charitable donations is not to donate on a nationwide basis. Should the Company resume any national CSR programme in Ukraine, the Board will ensure adherence to the highest standards of diligence, oversight, governance and reporting.

2. Global steel demand

Root cause and impact

The Group's realised price is principally impacted by demand for iron ore which is highly correlated to global demand for steel and steel mill profitability.

A weak demand environment would support demand for low grade iron ore as steel mills look to reduce their input costs and, therefore, reduce the premium paid for high quality ores and pellets. Higher scrap usage could also impact overall demand for iron ore and hence iron ore pricing.

In 2019, steel production increased in China (+8.3%), India (+1.8%) and the Middle East (+19.2%) while it decreased in most of the rest of the world. Europe 28 production was down 4.9%, Japan down 4.8% and South Korea down 1.4%.

Profit margins at steel mills in Germany fell from around mid-teens at the start of 2019 to low single digits by the end of the year. In China, profit margins fell sharply in 3Q 2019 from around break-even levels at the start of the year, and ended the year with a small recovery to positive single digits. Margins were under pressure due to increased raw material costs and weaker end-user demand. To date in 2020, the outlook for steel mill margins is subject to the impact of the coronavirus, which cannot be fully assessed at present. During 1Q 2020, the COVID-19 virus began causing disruption to Chinese supply chains which in turn is impacting the distribution networks of steel producers and their customers. This is likely to result in increased short-term volatility for the iron ore market. Once supply chains return to normal operation, there could be a prompt drawdown of steel inventory, which has built up during this period of disruption, causing downward pressure on steel prices. Further, a significant spread of the COVID-19 virus into Europe could also impact steel demand and subsequently pellet demand from the largest pellet-consuming region.

Mitigation

Ferrexpo is a low cost producer relative to the majority of its peers, positioned on the lower half of the pellet cost curve. Ferrexpo's operating costs are partly correlated with commodity prices. When the commodities cycle is in a downward phase, and Ferrexpo typically receives a lower selling price, its cost base in general also reduces. The Hryvnia is a commodity-related currency and historically over the long term it has depreciated during periods of low commodity prices, although movements of the Hryvnia against the US Dollar can also be influenced by short-term political factors.

3. Risks related to realised pricing

3.1 Change in pricing methodology

Root cause and impact

Ferrexpo's achieved price can vary significantly from period to period as it is dependent on the global price for iron ore fines, pellet premiums and freight.

The Group's pricing formula for its long-term contracts is based on the leading iron ore fines indices plus a negotiated pellet premium and an adjustment for the cost of international freight, typically the C3 index.

In 2019, most pellet exporters to the seaborne market, including Ferrexpo, agreed with customers to base pellet pricing off the 65% Fe iron ore fines price. This represented a major change for the industry and allowed producers of 65% Fe pellets, such as Ferrexpo, to directly capture the price premium for higher grade ore.

Price negotiations for 2020 remain ongoing.

Mitigation

Ferrexpo endeavours to achieve the prevailing market price at all times, however, it is a low cost producer and has always been cash flow positive through the commodities cycle. *For more information on its position on the cost curve see Market Review*

page 16. The Group also has the logistics capability to divert sales to other markets to offset any regional weakness.

3.2. Lower iron ore prices (external risk)

Root cause and impact

A decline in the iron ore fines price will reduce Group revenue, profitability and cash generation. A reduction in cash generation could impact the Group's ability to fund maintenance and development capital investment. Lower levels of maintenance investment could result in lower production volumes, higher production costs, reduced cash generation and a weakened balance sheet. This could impact the Group's ability to pay dividends to shareholders, repay debt amortisation and invest in future production growth.

The 62% Fe iron ore fines price averaged US\$93 per tonne in 2019 compared to US\$69 per tonne in 2018.

The iron ore forward curve for benchmark 62% Fe iron ore fines is currently in backwardation with delivery in December 2020 at around US\$80 per tonne compared to spot on 16 March of approximately US\$90 per tonne.

Lower iron ore fines prices will reduce the Group's realised price and profitability.

Change

Mitigation

Ferrexpo is a low cost producer relative to the majority of its peers, positioned on the lower half of the pellet cost curve. Ferrexpo's operating costs are partly correlated with commodity prices. When the commodities cycle is in a downward phase, and Ferrexpo typically receives a lower selling price, its cost base in general also reduces. The Hryvnia is a commodity-related currency and historically over the long term it has depreciated during periods of low commodity prices, although movements of the Hryvnia against the US Dollar can also be influenced by short-term political factors.

Ferrexpo regularly reviews options to hedge the price of its output; however, its current strategy is to not enter into hedging agreements. Ferrexpo has maintained positive profit and cash generation throughout the iron ore price cycle.

3.3. Pellet premiums and pellet supply (external risk)

Root cause and impact

Historically, pellet premiums have been correlated to steel mill profitability as they are the most productive source of iron in a blast furnace and thus trade at a price premium to other types of iron ores. When steel producer profitability is under pressure the reduction in usage of higher cost raw materials could lead to lower demand for iron ore pellets and/or a fall in pellet premiums.

Lower pellet premiums will reduce Ferrexpo's realised price and could impact the Group's cash generation ability. This could impact the Group's ability to pay dividends to shareholders, repay debt amortisation and could result in lower levels of capital investment (including sustaining capex).

Historically, a substantial portion of Ferrexpo's profitability has been due to the pellet premium. The average Atlantic pellet premium from 2011 to 2019 was US\$42 per tonne.

Pellet premiums are primarily influenced by steel mill profitability; however, in the medium to long term premiums may also be influenced by increasing requirements to reduce air emissions in the steel production process or an increase in supply of lump ores.

High barriers to entry make it unlikely that there will be significant new pellet supply entering the market in 2020. Incumbent producers, however, can switch supply from blast furnace to direct reduction pellets or from international export to domestic consumption. The Group believes that in 2020 pellet seaborne supply will not increase due to weaker international prices.

Further low pellet premiums could result in some capacity reduction for producers with high pellet conversion costs.

A producer in Brazil is likely to return to the market (following a five-year outage due to a tailings dam failure) at the end of 2020 which could reduce pellet premiums; however, the producer has indicated that it will operate at around 30-35% of its 25 million tonne capacity for at least five years, given reduced tailings storage capacity.

Mitigation

Ferrexpo sells high quality pellets which underpins demand for its product throughout the commodity cycle. Should the pellet premium decline, Ferrexpo has one of the lowest pellet conversion costs in the industry, which should ensure that it is able to remain a competitive producer.

3.4. Seaborne freight rates (external risk)

Root cause and impact

As iron ore is a bulk commodity, seaborne freight rates are an important component of the cost to deliver product to a customer. An increase in freight rates will reduce the net price received from a customer, and reduce profitability, while a reduction in freight rates will increase the net price received from a customer.

Seaborne freight rates, such as C3, are published by the Baltic Exchange. C3 freight represents the cost for ocean transportation for iron ore from the Brazilian port of Tubarão (where the largest seaborne pellet supplier is based) to Qingdao, China (the world's largest steel producer).

Ferrexpo's received price is referenced to transparent freight indices such as the Baltic Exchange C3 freight price². In 2019, the C3 index was in line with 2018 at an average of US\$18 per tonne. Freight rates are largely influenced by the price of oil and demand for seagoing vessels from bulk commodity producers.

As of 1 January 2020, the International Maritime Organization enforced a new 0.5% global sulphur cap on fuel content in the shipping industry from the present 3.5% limit. Subject to supply and demand dynamics, including steel mill profitability, the introduction of IMO 2020 could increase freight costs, due to the installation cost of scrubbers or the higher cost of compliant fuel, for iron ore suppliers across the industry and reduce net prices and thus impact profitability.

Mitigation

Ferrexpo has its own in-house freight and distribution specialists who procure freight competitively on behalf of the Group. Ferrexpo's geographic proximity to its European customers is a competitive advantage compared to other iron ore producers.

4. Operating risks

4.1. Operating risks and hazards including mining, processing and logistics (Company-specific risks)

Root cause and impact

Ferrexpo operates large-scale mining operations and industrial process facilities, which pose significant operating challenges and environmental risks. The Group is exposed to geotechnical incidents, including high wall failures and tailings dam breaches, as well as catastrophic processing equipment failure. This could lead to large-scale fatalities, production-related shortfalls or shutdowns as well as logistics bottlenecks.

The Group's operations require significant sustaining capital expenditure and repair and maintenance programmes to ensure safe operation and availability of equipment. A reduction in sustaining capital or repairs and maintenance expenditure can result in accidents and/or fatalities, lower mining volumes, processing plant breakdowns and pelletiser line failures.

Production stoppages will reduce output, increase operating costs, and reduce the quality of the product. Lower volumes, higher costs and financial penalties due to poor quality and late delivery can impact the Group's cash generation ability, reducing liquidity levels and impacting capital investment A levels as well as our ability to repay debt and pay dividends to shareholders. Poor pellet quality or late delivery of product can also affect the Group's ability to perform according to customer contracts and its ability to maintain and renew contracts in the future.

Leadership development, in-depth technical know-how and a well-developed succession planning process is required to maintain detailed operating expertise and is key to underpinning the performance of the Group's operations and reducing operating risk

Mitigation

In 2019, the Group completed a programme to refurbish its pellet lines. Since listing in 2007, Ferrexpo has spent US\$959 million on sustaining and modernisation capital (2019 sustaining capex: US\$97 million; 2018 sustaining capex: US\$66 million).

Ferrexpo operates one tailings dam covering an area of 1,500 hectares. The dam is constructed on flat topography. The dam is split into three sections with each section subdivided into smaller sections of 400 metres by 400 metres. The walls of the dam and of the sections within the dam are constructed using engineered fill, including siliceous rock. Due to this construction

methodology, a total failure or breach of the major walls of the tailings impoundment is unlikely to occur. In the unlikely event of failure of the compartment walls or structure the impact would be minimal in terms of tailings release. The dam has been designed by external consultant Ukrgrigoruda, with biannual inspections by the Ukrainian mining regulator.

Following the tailings dam breach in Brazil in January 2019, the Group commissioned Knight Piésold Consulting to conduct an independent review of our tailings storage facility in terms of design, construction and operational management. The conclusion of the Knight Piésold report was that our tailings facility is an appropriate design for the volume of tailings being deposited, is well managed and has an appropriate inspection and monitoring regime. The report raised a number of key differences between the structure of Ferrexpo's tailings dam and the Brumadinho dam that failed in January 2019, specifically the topography of the area of construction of Ferrexpo's dam is on flat land (rather than valley fill), with embankments at a shallower angle and dam walls constructed using a mixture of materials including coarse compacted rock (as opposed to uncompacted material). The audit report made a number of recommendations with regard to improving the dam's operational management controls, which the Company is now looking to incorporate.

As a result of the continued development of the mines' open pit operations, Ferrexpo has recently implemented improved geotechnical management processes. This includes the use of international geotechnical consultants to regularly review the geotechnical management programme as well as monitoring and operational controls of the pit high walls.

Where possible, Ferrexpo owns its own logistics infrastructure. As of 31 December 2019, this included 2,850 rail cars, which reduces reliance on state rail cars for transportation of pellets to border points, 154 barges to transport pellets into Central Europe, and a 49.9% interest in the port of TIS Ruda on the Black Sea which guarantees the Group independent access to seaborne markets, avoiding reliance on the state port.

The Group operates a talent management and leadership programme to ensure management coverage of business-critical roles. This involves the annual assessment of all managers across the Group of approximately 300 people. The results are presented to the Operations Management Committee, the Executive Management Committee and to the Board.

4.2. Health and safety risks (company specific risk)

Root cause and impact

The mining and processing of iron ore is often associated with a hazardous working environment as it includes the use of explosives and the operation and repair of large mining machinery, amongst other things. Failure to provide a safe work environment for the Group's workforce and failure to ensure the right safety culture and subsequent safe behaviours can impact the Group's social licence to operate. Fatalities and lost time injuries negatively impact the workforce, their families and the communities in which we operate, and it can result in production stoppages due to regulatory interventions.

The Group was fatality free in 2019 (2018: one fatality) and the Group's lost time injury frequency rate ("LTIFR") declined to 0.58x – a record for the Group and a significant improvement on the 2018 result where the Group LTIFR was 1.18x.

Mitigation

Analysis conducted on the Group's incidents highlight non-compliant behaviour and work practices being the primary cause of accidents with a large proportion of these events involving the Group's contractors.

Actions taken during 2019 have been largely focused around contractors and FPM employees. Activities include:

- significant incident reporting and investigation methods;
- significant risk training and awareness;
- leadership development programme to ensure right safety culture is instilled in the work place;
- programme to improve housekeeping of maintenance and production areas and work place conditions;
- increased frequency of external HSE audits and review of subsequent action plans;
- development of a standardised reporting procedure and alignment to international best practice through benchmarking;
- implementation of Visible Leadership programme;
- safety training to instill a culture of accountability. The goal of these workshops is to emphasise and ensure that all employees understand and appreciate the importance of good operating discipline and the strict adherence to safety procedures and that protection of our employees is paramount; and

- an increase in speed checks, implementation of stationary speed monitoring devices and speed cameras, as well as enhanced drug and alcohol testing to provide greater sampling of the workforce.

A portion of all employees' total remuneration, especially the bonus structure, is linked to team and individual safety performance

4.3. Operating cost increases (external and company risk)

Root cause and impact

The production of iron ore pellets is a more capital-intensive process than other types of iron ore production as it requires the enrichment of relatively low grade iron ore into a high grade iron ore product. As such, pellet producers typically have higher operating costs per tonne of output than producers of iron ore fines or lump.

Approximately 30% Ferrexpo's C1 cash cost of production (US\$ per tonne) is commodity related, including fuel, gas, explosives, tires and steel grinding media. In times of relatively high iron ore prices the cost of production tends to increase due to commodity cost inflation; however, during periods of low commodity prices the cash cost is typically reduced. In addition, over 60% of the Group's operating costs, including in-land logistics costs, are incurred in Ukrainian Hryvnia. The Hryvnia is a commodity-related currency and historically over the long term it has depreciated during periods of low commodity prices, although movements of the Ukrainian Hryvnia against the US Dollar can also be influenced by short-term political factors.

As such, the Group's cost of production is sensitive to local inflation, exchange rate fluctuations between the Hryvnia and the US Dollar and US Dollar commodity cost inflation.

In the higher pellet premium environment the Group has taken the opportunity to increase its repair and maintenance activities to further improve equipment reliability and performance. The Group is also increasing its mining activity at FPM to sustain existing volume of higher grade ore and access new plots with higher grade ore.

In 2019, the Group's C1 cash cost of production increased to US\$47.8 per tonne from US\$43.3 per tonne. *See pages [10 and 11] for a description of the factors impacting operating costs.*

In 2020, the Group expects royalties (which are included in the C1 cash cost of production) to increase by approximately US\$1 per tonne due to new royalty tax legislation expected to be adopted in March 2020, impacting the Group from 2Q 2020.

Change

Mitigation

Ferrexpo sits in the bottom half of the pellet cost curve. Many of its costs which relate to commodity prices will impact its peers to a similar extent. As such in times of higher commodity prices, the Group should be able to maintain its cost competitiveness relative to its competitors.

Ferrexpo looks to increase production volumes to ensure fixed cost dilution and enable the Group to offset (to some extent) external cost inflation. The Group has a Business Improvement Programme aimed at increasing efficiencies and reducing costs by 1% to 2% per annum.

Ferrexpo has established several sources of suppliers for key products as well as several supply routes.

STATEMENT OF DIRECTORS' RESPONSIBILITIES

17 March 2020

Statement by the Directors under the UK Corporate Governance Code

The Directors are responsible for preparing the Annual Report and the financial statements in accordance with applicable law and regulations.

Company law requires the Directors to prepare such financial statements for each financial year. Under that law the Directors are required to prepare the Group financial statements in accordance with International Financial Reporting Standards ("IFRS") as adopted by the European Union and Article 4 of the IAS Regulation, and have also chosen to prepare the Parent Company financial statements in accordance with Financial Reporting Standard 101 (Reduced Disclosure Framework). Under company law the Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and the Parent Company and of their profit or loss for that period.

In preparing the Parent Company financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether Financial Reporting Standard 101 (Reduced Disclosure Framework) has been followed, subject to any material departures disclosed and explained in the financial statements; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Company will continue in business.

In preparing the Group financial statements, International Accounting Standard 1 requires that the Directors:

- properly select and apply accounting policies;
- present information, including accounting policies, in a manner that provides relevant, reliable, comparable and understandable information;
- provide additional disclosures when compliance with the specific requirements in IFRSs is insufficient to enable users to understand the impact of particular transactions, other events and conditions on the entity's financial position and financial performance; and
- make an assessment of the Group's ability to continue as a going concern.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Parent Company's transactions and disclose with reasonable accuracy at any time the financial position of the Parent Company and enable them to ensure that its financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Group and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for the maintenance and integrity of the corporate and financial information included on the Company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Responsibility Statement of the Directors in respect of the Annual Report and Accounts

We confirm that to the best of our knowledge:

- (a) the financial statements, prepared in accordance with applicable accounting standards, give a true and fair view of the assets, liabilities, financial position and profit or loss of the Company and the subsidiary undertakings included in the consolidation taken as a whole
- (b) the Strategic Report includes a fair review of the development and performance of the business and the position of the Company and the subsidiary undertakings included in the consolidation taken as a whole, together with a description of the principal risks and uncertainties that they face; and
- (c) the Annual Report and financial statements, taken as a whole, is fair, balanced and understandable, and provides the information necessary for shareholders to assess the Group's position, performance, business model and strategy.

This responsibility statement was approved by the Board of Directors on 17 March 2020 and is signed on its behalf by:

Steve Lucas
Chairman

Chris Mawe
Acting Chief Executive Officer

INDEPENDENT AUDITOR’S REPORT TO THE SHAREHOLDERS OF FERREXPO PLC ON THE PRELIMINARY ANNOUNCEMENT OF FERREXPO PLC

As the independent auditor of Ferrexpo plc we are required by UK Listing Rule LR 9.7A.1 (2) to agree to the publication of Ferrexpo plc’s preliminary statement of annual results for the year ended 31 December 2019.

The preliminary statement of annual results for the year ended 31 December 2019 includes the 2019 full year results and the disclosures required by the Listing rules including:

- Financial Highlights and 2019 Financial Summary;
- Chairman’s Statement;
- Management commentary included in the Financial Review, Market Review, Operations Review and Principal Risks sections;
- Statement of Directors’ Responsibilities;
- Consolidated Income Statement;
- Consolidated Statement of Comprehensive Income;
- Consolidated Statement of Financial Position;
- Consolidated Statement of Cash Flows;
- Consolidated Statement of Changes in Equity;
- Notes to the Consolidated Financial Statements; and
- Alternative Performance Measures.

The Directors of Ferrexpo plc are responsible for the preparation, presentation and publication of the preliminary statement of annual results in accordance with the UK Listing Rules.

We are responsible for agreeing to the publication of the preliminary statement of annual results, having regard to the Financial Reporting Council’s Bulletin “The Auditor’s Association with Preliminary Announcements made in accordance with the requirements of the UK Listing Rules”.

Status of our audit of the financial statements

Our audit of the annual financial statements of Ferrexpo plc for the year ended 31 December 2019 is complete and we signed our auditor’s report on 17 March 2020. Our auditor’s report is not modified and contains no emphasis of matter paragraph.

Procedures performed to agree to the preliminary announcement of annual results

In order to agree to the publication of the preliminary announcement of annual results of Ferrexpo plc we carried out the following procedures:

- Confirmed that the preliminary statement includes the minimum information required by the Listing Rules.
- Checked that the figures in the preliminary statement have been accurately extracted from the audited financial statements.
- Checked the consistency of presentation of the financial information in the preliminary statement with the audited financial statements.
- Read management commentary, the financial information in the consolidated financial statements and notes thereof and considered if the management commentary is:
 - Fair, balanced and understandable
 - Materially consistent with the financial statements and with the contents of the annual report
 - Consistent with the information and our knowledge obtained in the course of the audit of the financial statements of Ferrexpo plc for the year ended 31 December 2019.
- Considered if for Alternative Performance Measures (“APM”) and associated narrative:
 - APMs are clearly defined and have been given meaningful labels
 - The use and relevance of APMs is explained
 - APMs have been reconciled to the most relevant figures in the financial statements

- Comparatives have been included
- Considering whether the financial information in the preliminary announcement is misstated, either because it is stated incorrectly or because it is presented in a misleading manner.

Rakesh Shaunak FCA

Senior Statutory Auditor

For and on behalf of MHA MacIntyre Hudson,

Statutory Auditor

London

17 March 2020

CONSOLIDATED INCOME STATEMENT

US\$000	Notes	Year ended 31.12.19	Year ended 31.12.18
Revenue	3/4	1,506,724	1,274,030
Operating expenses	3/5	(968,443)	(844,470)
Other operating income		5,614	3,314
Operating foreign exchange losses	6	(46,752)	(5,295)
Operating profit		497,143	427,579
Share of profit from associates		4,114	5,360
Profit before tax and finance		501,257	432,939
Net finance expense	7	(23,191)	(39,332)
Non-operating foreign exchange losses	6	(18,491)	(1,585)
Profit before tax		459,575	392,022
Income tax expense	8	(56,282)	(56,801)
Profit for the year		403,293	335,221
Profit attributable to:			
Equity shareholders of Ferrexpo plc		402,370	333,616
Non-controlling interests		923	1,605
Profit for the year		403,293	335,221
Earnings per share:			
Basic (US cents)	9	68.6	56.9
Diluted (US cents)	9	68.4	56.7

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

US\$000	Notes	Year ended 31.12.19	Year ended 31.12.18
Profit for the year		403,293	335,221
<i>Items that may subsequently be reclassified to profit or loss:</i>			
Exchange differences on translating foreign operations		266,163	12,178
Income tax effect	8	(20,487)	(2,007)
Net other comprehensive income that may be reclassified to profit or loss in subsequent periods		245,676	10,171
<i>Items that will not be reclassified subsequently to profit or loss:</i>			
Remeasurement (losses)/gains on defined benefit pension liability		(6,898)	875
Net other comprehensive (loss)/income not being reclassified to profit or loss in subsequent periods		(6,898)	875
Other comprehensive income for the year, net of tax		238,778	11,046
Total comprehensive income for the year, net of tax		642,071	346,267
Total comprehensive income attributable to:			
Equity shareholders of Ferrexpo plc		639,722	344,587
Non-controlling interests		2,349	1,680
		642,071	346,267

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

US\$000	Notes	As at 31.12.19	As at 31.12.18
Assets			
Property, plant and equipment		1,044,426	701,376
Right-of-use assets	10	10,976	–
Goodwill and other intangible assets		47,552	39,609
Investments in associates		8,064	7,037
Inventories	11	255,026	217,688
Other non-current assets		24,093	32,104
Deferred tax assets	8	38,608	27,946
Total non-current assets		1,428,745	1,025,760
Inventories	11	199,714	144,919
Trade and other receivables		99,864	85,695
Prepayments and other current assets		42,653	27,344
Income taxes recoverable and prepaid	8	184	61
Other taxes recoverable and prepaid		37,377	44,837
Cash and cash equivalents	12	131,020	62,996
Total current assets		510,812	365,852
Total assets		1,939,557	1,391,612
Equity and liabilities			
Issued capital		121,628	121,628
Share premium		185,112	185,112
Other reserves		(1,764,808)	(2,010,080)
Retained earnings		2,810,622	2,568,187
Equity attributable to equity shareholders of Ferrexpo plc		1,352,554	864,847
Non-controlling interests		78	2,050
Total equity		1,352,632	866,897
Interest-bearing loans and borrowings	3/13	274,011	197,258
Defined benefit pension liability		33,628	21,444
Provision for site restoration		3,016	1,940
Deferred tax liabilities	8	140	352
Total non-current liabilities		310,795	220,994
Interest-bearing loans and borrowings	3/13	138,367	204,600
Trade and other payables		65,627	34,292
Accrued and contract liabilities		39,257	32,693
Income taxes payable	8	21,248	20,571
Other taxes payable		11,631	11,565
Total current liabilities		276,130	303,721
Total liabilities		586,925	524,715
Total equity and liabilities		1,939,557	1,391,612

The financial statements were approved by the Board of Directors on 17 March 2020.

Steve Lucas
Chairman

Christopher Mawe
Acting Chief Executive Officer

CONSOLIDATED STATEMENT OF CASH FLOWS

US\$000	Notes	Year ended 31.12.19	Year ended 31.12.18
Profit before tax		459,575	392,022
<i>Adjustments for:</i>			
Depreciation of property, plant and equipment, right-of-use assets and amortisation of intangible assets		82,130	62,094
Finance expense	7	21,267	37,832
Finance income	7	(1,436)	(891)
Losses on disposal of property, plant and equipment		417	5,701
Cash elements included in losses on disposal of property, plant and equipment		(153)	(372)
Write-offs		1,241	1,489
Share of profit from associates		(4,114)	(5,360)
Movement in allowance for doubtful receivables		736	222
Movement in site restoration provision		437	(162)
Employee benefits		3,534	3,642
Share-based payments		1,022	674
Operating foreign exchange losses	6	46,752	5,295
Non-operating foreign exchange losses	6	18,491	1,586
Other adjustments		(7,307)	(7,657)
Operating cash flow before working capital changes		622,592	496,115
<i>Changes in working capital:</i>			
Increase in trade and other receivables		(23,479)	(12,785)
Increase in inventories		(37,152)	(87,999)
Increase in trade and other payables (incl. accrued and contract liabilities)		19,590	1,903
Decrease/(increase) in other taxes recoverable and payable (incl. VAT)		11,371	(17,530)
Cash generated from operating activities		592,922	379,704
Interest paid		(33,932)	(42,768)
Income tax paid	8	(83,730)	(43,509)
Post-employment benefits paid		(1,884)	(1,702)
Net cash flows from operating activities		473,376	291,725
Cash flows from investing activities			
Purchase of property, plant and equipment and intangible assets		(247,478)	(135,113)
Proceeds from disposal of property, plant and equipment and intangible assets		1,165	800
Interest received		1,344	827
Dividends from associates		3,519	4,137
Acquisition of non-controlling interests		(2,189)	–
Net cash flows used in investing activities		(243,639)	(129,349)
Cash flows from financing activities			
Proceeds from borrowings and finance	13	225,000	214,317
Repayment of borrowings and finance	13	(223,774)	(308,817)
Principal elements of lease payments	13	(5,118)	–
Arrangement fees paid		(131)	(5,817)
Dividends paid to equity shareholders of Ferrexpo plc		(154,922)	(96,559)
Net cash flows used in financing activities		(158,945)	(196,876)
Net increase/(decrease) in cash and cash equivalents		70,792	(34,500)
Cash and cash equivalents at the beginning of the year		62,996	97,742
Currency translation differences		(2,768)	(246)
Cash and cash equivalents at the end of the year	12	131,020	62,996

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

US\$000	Attributable to equity shareholders of Ferrexpo plc					Non-controlling interests	Total Equity
	Issued capital	Share premium	Other reserves	Retained earnings	Total capital and reserves		
At 1 January 2018	121,628	185,112	(2,020,864)	2,330,580	616,456	370	616,826
Profit for the year	–	–	–	333,616	333,616	1,605	335,221
Other comprehensive income	–	–	10,110	861	10,971	75	11,046
Total comprehensive income for the year	–	–	10,110	334,477	344,587	1,680	346,267
Share-based payments	–	–	674	–	674	–	674
Equity dividends to shareholders of Ferrexpo plc	–	–	–	(96,870)	(96,870)	–	(96,870)
At 31 December 2018	121,628	185,112	(2,010,080)	2,568,187	864,847	2,050	866,897
Profit for the year	–	–	–	402,370	402,370	923	403,293
Other comprehensive income	–	–	244,250	(6,898)	237,352	1,426	238,778
Total comprehensive income for the year	–	–	244,250	395,472	639,722	2,349	642,071
Share-based payments	–	–	1,022	–	1,022	–	1,022
Equity dividends to shareholders of Ferrexpo plc	–	–	–	(155,087)	(155,087)	–	(155,087)
Effect from increase of shareholding in subsidiary	–	–	–	2,050	2,050	(4,321)	(2,271)
At 31 December 2019	121,628	185,112	(1,764,808)	2,810,622	1,352,554	78	1,352,632

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1: Corporate information

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 17 March 2020. The financial information for the years ended 31 December 2019 and 31 December 2018 has been extracted from the statutory accounts for each year.

The auditors' report on the 2019 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 S498(3) of the Companies Act 2006. The audited statutory accounts for the year ended 31 December 2018 have been delivered to the Registrar of Companies and the auditors' report under section 495 of the Companies Act 2006 in relation to those accounts was qualified and contained a statement under section 498(3) of the Companies Act 2006. The auditors' report did not contain a statement under section 498(2) of the Companies Act 2016.

Ferrexpo plc will publish on or around 15 April 2020 its Annual Report and Accounts for the year ended 31 December 2019 on its corporate website www.ferrexpo.com. The audited statutory accounts for the year ended 31 December 2019 will be delivered to the Registrar of Companies following the Company's annual meeting convened for Thursday, 28 May 2020.

Organisation and structure

Ferrexpo plc (the "Company") is incorporated and registered in England, which is considered to be the country of domicile, with its registered office at 55 St James's Street, London SW1A 1LA, UK. Ferrexpo plc and its subsidiaries (the "Group") operate two mines and a processing plant near Kremenchug in Ukraine, have an interest in a port in Odessa and sales and marketing activities around the world including offices in Switzerland, Dubai, Japan, China, Singapore and Ukraine. The Group also owns logistics assets in Austria, which operate a fleet of vessels operating on the Rhine and Danube waterways and an ocean-going vessel, which provides toff services. The Group's operations are vertically integrated from iron ore mining through to iron ore concentrate and pellet production and subsequent logistics. The Group's mineral properties lie within the Kremenchug Magnetic Anomaly and are currently being extracted at the Gorishne-Plavninske-Lavrykivske ("GPL") and Yerstivske deposits.

The majority shareholder of the Group is Fevamotinic S.a.r.l. ("Fevamotinic"), a company incorporated in Luxembourg. Fevamotinic is ultimately wholly owned by The Minco Trust, of which Kostyantyn Zhevago, the Group's previous Chief Executive Officer, is one of the beneficiaries. At the time this report was published, Fevamotinic held 50.3% (2018: 50.3%) of Ferrexpo plc's issued share capital.

Note 2: Basis of preparation

Whilst the preliminary announcement has been prepared in accordance with International Financial Reporting Standards ('IFRS') and International Financial Reporting Interpretation Committee ("IFRIC") interpretations adopted for use by the European Union and with those parts of the Companies Act 2006 applicable to companies reporting under IFRS, this announcement does not itself contain sufficient information to comply with IFRS. The Board approved the full financial statements that comply with IFRS on 17 March 2020. The financial statements have been prepared under the historical cost convention as modified by the recording of pension assets and liabilities and the revaluation of certain financial instruments.

The Group's principal risks likely to affect its future development, performance and position are set out on pages 22 to 28. The financial position of the Group, its cash flows, liquidity position and borrowing facilities are described in the Financial Review on pages 10 to 13.

Going concern

The Group has assessed that, taking into account: i) its available cash and cash equivalents available at the date of authorisation of the consolidated financial statements; ii) its cash flow projections for the period of management's going concern assessment; and iii) events and conditions beyond the period of management's going concern assessment, it has sufficient liquidity to meet its present obligations and cover working capital needs for the aforementioned period and will remain in compliance with its financial covenants throughout this period. Therefore, the Group continues to adopt the going concern basis of accounting for the preparation of this set of financial statements.

Changes in accounting policies

The accounting policies and methods of computation adopted in the preparation of the consolidated financial statements are consistent with those followed in the preparation of the Group's annual financial statements for the year ended 31 December 2018 except for the adoption of new amendments and improvements to IFRSs effective as of 1 January 2019.

New standards and interpretations adopted with an impact on the Group's consolidated financial statements

IFRS 16 Leases

The Group applied IFRS 16 *Leases*, as issued in January 2016, for the first time as of 1 January 2019. The standard replaces the previous leases standard, IAS 17 *Leases*, and related interpretations. IFRS 16 establishes the principles for the recognition, measurement, presentation and disclosure of leases for the customer ("lessee") and the supplier ("lessor") and eliminates the classification of leases as either operating or finance for the lessee as is required by IAS 17. Instead, it introduces a single lessee accounting model requiring a lessee to recognise assets and liabilities for all leases unless the underlying asset has a low value or the lease term is 12 months or less.

In accordance with the transition provisions set out in IFRS 16, the Group elected to apply the standard retrospectively, with the cumulative impact of the first-time adoption recognised at the date of initial application. On transition, the Group grandfathered its previous assessment of operating leases under IAS 17 and recognised for these lease contracts right-of-use assets and corresponding lease liabilities in the consolidated statement of financial position with no impact on retained earnings. The lease liabilities were measured at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate at initial application which is the interest rate that the Group would have to pay to borrow over a similar term the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The corresponding right-of-use assets were measured at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the consolidated statement of financial position as at the end of the comparative year ended 31 December 2018. The balance of lease liabilities and right-of-use assets relating to leases classified as finance leases as at the end of the comparative year ended 31 December 2018 was carried forward to the date of initial application. The new requirements of the standard as to whether a contract contains a lease component or not were applied to the identification of new lease contracts signed subsequent to 1 January 2019.

On transition, the Group elected to apply the following practical expedients and exemptions, as permitted under the transition provisions set out in the standard:

- application of a single discount rate to a portfolio of leases with similar characteristics;
- recognition exemption for low-value and short-term leases, which are therefore recognised in the consolidated income statement on a straight-line basis; and
- accounting for each lease component and any associated non-lease components as a single lease component instead of separating the non-lease components from the lease ones.

Currently, the Group leases land, buildings and equipment. The vast majority of land leases are for land used for the extraction of ore and are not within the scope of IFRS 16, according to the scope exemptions set out in the standard. The new standard primarily resulted in the recognition of right-of-use assets and lease liabilities in respect of long-term rental contracts for several of the Group's office premises with rental periods of five to ten years, land not used for the direct extraction of ore as well as for leased equipment.

The following table provides a reconciliation between the balance of operating lease commitments as at 31 December 2018 and the lease liability recognised on 1 January 2019:

US\$000	Balance as at 01.01.19
Operating lease commitments as at 31 December 2018	8,827
Recognition exemption for mining land ¹	(331)
Land under permanent use ²	971
Short-term leases recognition exemption	(348)
Total minimum lease payments	9,119
Less: amounts representing finance charges	(1,418)
Add: leases previously classified as finance leases	2,074
Lease liabilities recognised as at 1 January 2019	9,775
<i>Thereof non-current portion</i>	<i>4,799</i>
<i>Thereof current portion</i>	<i>4,976</i>

1 Leases used for the extraction of ore are not within the scope of IFRS 16 according to the scope exemptions set out in the standard.

2 Land not used for the direct extraction of ore in Ukraine, the country of the Group's mining operations. These lease agreements with the Ukrainian government typically have a duration of up to 49 years requiring land lease payments in the form of rental taxes based on annually determined rates by the government.

The lease liability is measured at the net present value of the remaining lease payments, discounted using the interest rate implicit in the lease or, when not available, the incremental borrowing rate computed for a group of leases with similar characteristics as regards to type of asset, lease term, contract currency and economic environment.

The following tables provide the details of the cumulative effects from the application of the new standard IFRS 16 *Leases* on the consolidated statement of financial position as of 1 January 2019 and the consolidated statement of financial position and the consolidated income statement as at 31 December 2019:

US\$000	Notes	Balance as at 01.01.19	Effect from application of IFRS 16	Year ended 31.12.18
Consolidated statement of financial position				
<i>Assets</i>				
Property, plant and equipment		699,495	(1,881)	701,376
Right-of-use assets	10	9,582	9,582	–
<i>Liabilities</i>				
Interest-bearing loans and borrowings – non-current	13	(4,799)	(4,799)	–
Interest-bearing loans and borrowings – current	13	(4,976)	(2,902)	(2,074)

US\$000	Notes	As reported as at 31.12.19	Effect from application of IFRS 16	Balance without effect from new IFRSs
Consolidated income statement				
Operating expenses	5	(968,443)	160	(968,603)
Net finance expense	5	(23,191)	(503)	(22,688)
Consolidated statement of financial position				
<i>Assets</i>				
Property, plant and equipment		1,044,426	(1,881)	1,046,307
Right-of-use assets	10	10,976	10,976	–
<i>Liabilities</i>				
Interest-bearing loans and borrowings – non-current	13	(274,011)	(3,844)	(270,167)
Interest-bearing loans and borrowings – current	13	(138,367)	(3,264)	(135,103)

The adoption of IFRS 16 *Leases* has not had any material impact on the underlying EBITDA and on basic and diluted earnings per share.

The impact on the net cash flows from operating activities from payments for short-term and low-value leases was US\$425 thousand for the year ended 31 December 2019.

Further information in relation to the Group's leases and lease-related commitments are provided in Note 10 Leases and Note 14 Commitments, contingencies and legal disputes.

Amendment to IAS 19 *Employee benefits: Plan amendment, curtailment or settlement*

The Group applies the new amendment to IAS 19 *Employee benefits*, as published by IASB on 7 February 2018, for the first time as of 1 January 2019. The purpose of the new amendments is to harmonise the accounting practices in terms of plan amendments, curtailments and settlements and to provide further relevant information on such changes to the plan. As at 1 January 2020, the collective pension plan (multi-employer plan) in Switzerland is going to harmonise the conversion rates for the mandatory and the supplementary portion of the scheme, which is considered to be a plan amendment. The plan amendment occurred on 1 April, 2019. The effect of US\$409 thousand is reflected in the past service costs as of 31 December 2019 as a one-time effect in the Group's consolidated income statement. The service cost and net interest cost have been adjusted in line with the amended IAS 19.

New standards, interpretations and amendments adopted without an impact on the Group's consolidated financial statements

- Annual Improvements to IFRS Standards 2015-2017 Cycle contains amendments to IFRS 3 *Business combinations* and IFRS 11 *Joint arrangements*, IAS 12 *Income taxes* and IAS 23 *Borrowing costs*.
- Amendments to IAS 28 *Long-term interests in associates and joint ventures* clarifies that other interests in associates and joint ventures, including long-term interests not accounted for using the equity method of accounting and that, in substance, form part of the net investment in those associates and joint ventures, fall within the scope of IFRS 9.
- IFRIC 23 *Uncertainty over income tax treatments* clarifies and changes the method of calculating provisions for uncertain income tax positions accounted for under IAS 12 *Income taxes*. The new interpretation requires the determination of the provision based on the single most likely amount in a range of possible outcomes or the sum of the probability-weighted amounts in a range of possible outcomes, if it is not probable that the tax authorities accept a tax treatment. The Group applied IFRIC 23 for the first time as of 1 January 2019 and the first-time application had no material impact on the Group's taxable results, tax bases, unused tax losses, unused tax credits and tax rates. See Note 8 Taxation in respect of critical judgement involved in the assessment of the Group's tax position in accordance with IFRIC 23.
- Amendments to IFRS 9 *Financial instruments: Prepayment features with negative compensation* clarifies the classification of particular pre-payable financial assets and the accounting for financial liabilities following a modification.

New standards, interpretations and amendments not yet adopted

The Group has elected not to adopt early any revised and amended standards or interpretations that are not yet mandatory in the EU. The standards and interpretations below could have an impact on the consolidated financial statements of the Group.

Amendments to *References to the Conceptual Framework in IFRS standards*

The revised Conceptual Framework was issued in March 2018 and is effective for the financial year beginning on 1 January 2020 subject to EU endorsement. The amendments introduce a new chapter on measurement, guidance on reporting financial performance, improved definitions of an asset and a liability and clarifications in areas such as the roles of stewardship, prudence and measurement uncertainty in financial reporting. The Group does not expect a material impact on its consolidated financial statements from these amendments.

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

The amendments were issued in October 2018 and are effective for the financial year beginning on 1 January 2020 subject to EU endorsement. The amendments introduce a revised definition of material information. In the new definition, reference is made to the concepts of obscured information and reasonable expectation that the information is going to influence the decisions that the primary users of general purpose financial statements make on the basis of those financial statements. The Group does not expect a material impact on its consolidated financial statements from these amendments.

Furthermore, the Group does not expect an impact on its consolidated financial statements from all other standards, interpretations and amendments issued at the reporting date, but not yet to be adopted for these financial statements.

Use of critical estimates and judgements

The preparation of consolidated financial statements in conformity with IFRSs requires management to make estimates and judgements that affect the amounts reported in the consolidated financial statements and accompanying notes. These estimates and judgements are based on information available as at the date of authorising the consolidated financial statements for issue. Actual results could therefore differ from those estimates and judgements. The Group identified a number of areas involving the use of critical estimates and judgements made by management in preparing the consolidated financial statements and supporting information is embedded within the following disclosure notes:

Critical estimates

- Note 11 Inventories – lean and weathered ore

Critical judgements

- Note 5 Operating expenses – nature of the Group’s community support donations — Note 8 Taxation – tax legislation in Ukraine
- Note 15 Related party disclosure – completeness

Note 3: Segment information

The Group is managed as a single segment, which produces, develops and markets its principal product, iron ore pellets, for sale to the metallurgical industry. While the revenue generated by the Group is monitored at a more detailed level, there are no separate measures of profit reported to the Group’s Chief Operating Decision Maker (“CODM”). In accordance with IFRS 8 *Operating segments*, the Group presents its results in a single segment, which are disclosed in the income statement for the Group.

Management monitors the operating result of the Group based on a number of measures, including underlying EBITDA, gross profit and net debt.

Underlying EBITDA and gross profit

The Group presents the underlying EBITDA as it is a useful measure for evaluating its ability to generate cash and its operating performance. The Group’s full definition of underlying EBITDA is disclosed in the Alternative Performance Measures (“APM”) section on page 55.

US\$000		Year ended 31.12.19	Year ended 31.12.18
Profit before tax and finance		501,257	432,939
Losses on disposal of property, plant and equipment		417	5,701
Share-based payments		1,022	674
Write-offs		1,241	1,489
Depreciation and amortisation		82,130	62,094
Underlying EBITDA		586,067	502,897

US\$000	Notes	Year ended 31.12.19	Year ended 31.12.18
Revenue	4	1,506,724	1,274,030
Cost of sales	5	(581,743)	(507,939)
Gross profit		924,981	766,091

Net debt

Net debt as defined by the Group comprises cash and cash equivalents less interest-bearing loans and borrowings.

US\$000	Notes	As at 31.12.19	As at 31.12.18
Cash and cash equivalents	12	131,020	62,996
Interest-bearing loans and borrowings – current	13	(138,367)	(204,600)
Interest-bearing loans and borrowings – non-current	13	(274,011)	(197,258)
Net debt		(281,358)	(338,862)

The Group made debt repayments of US\$229,374 thousand during the year ended 31 December 2019 (2018: US\$308,817 thousand). Net debt is an APM. Further information on the APMs used by the Group, including the definitions, is provided on pages 55 to 57.

Net debt as at 31 December 2019 included an effect of US\$7,108 thousand as a result of the first-time application of the new standard IFRS 16 *Leases*. For further information on the impact of the adoption of the new standard IFRS 16 *Leases* see Note 2 Basis of preparation.

Disclosure of revenue and non-current assets

The Group does not generate significant revenues from external customers attributable to the UK, the Company's country of domicile. The information on the revenues from external customers attributed to the individual foreign countries is given in Note 4 Revenue. The Group does not have any significant non-current assets that are located in the country of domicile of the Company. The vast majority of the non-current assets are located in Ukraine.

Note 4: Revenue

Revenue for the year ended 31 December 2019 consisted of the following:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Revenue from sales of iron ore pellets and concentrate	1,352,953	1,146,734
Freight revenue related to sales of iron ore pellets and concentrate	94,617	74,929
Total revenue from sales of iron ore pellets and concentrate	1,447,570	1,221,663
Revenue from logistics and bunker business	54,168	48,778
Revenue from other sales and services provided	4,986	3,589
Total revenue	1,506,724	1,274,030

Revenue for the year ended 31 December 2019 includes the effect from the derecognition of contract liabilities of US\$4,637 thousand (2018: US\$6,006 thousand) deferred as revenue in the comparative year ended 31 December 2018. As at 31 December 2019, freight-related revenue in the amount of US\$8,572 thousand was deferred in relation to the performance obligations not fulfilled and included in the balance of the contract liabilities.

Export sales of iron ore pellets and concentrate by geographical destination showing separately countries that individually represented more than 10% of export sales in either the current or prior year were as follows:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Central Europe	529,159	565,820
<i>Austria</i>	<i>331,964</i>	<i>290,825</i>
<i>Others</i>	<i>197,195</i>	<i>274,995</i>
Western Europe	183,560	193,540
<i>Germany</i>	<i>168,875</i>	<i>172,108</i>
<i>Others</i>	<i>14,685</i>	<i>21,432</i>
North East Asia	250,721	221,985
<i>Japan</i>	<i>161,186</i>	<i>127,336</i>
<i>Others</i>	<i>89,535</i>	<i>94,649</i>
China & South East Asia	412,613	176,135
<i>China</i>	<i>347,892</i>	<i>125,315</i>
<i>Others</i>	<i>64,721</i>	<i>50,820</i>
Turkey, Middle East & India	62,717	64,183
<i>Turkey</i>	<i>62,717</i>	<i>64,183</i>
Other	8,800	–
Total exports	1,447,570	1,221,663

The Group markets its products across various regions. The disclosure of the segmentation reflects how the Group makes its business decisions and monitors its sales.

During the year ended 31 December 2019, sales made to three customers accounted for 40% of the revenues from export sales of ore pellets and concentrate (2018: 40%).

Sales to one customer that individually represented more than 10% of total sales in either the current or prior year amounted to US\$331,964 thousand (2018: US\$290,825 thousand).

Note 5: Operating expenses

Critical judgements

Nature of the Group's community support donations

On 4 February 2019, the Group announced that it had established the Independent Review Committee ("IRC") to carry out an independent review into the use of funds donated by the Group to the third party charity fund Blooming Land (the "Charity") prior to the financial year 2019. Whilst a significant amount of work was undertaken by the IRC and its advisers during the financial year 2019, it has not been possible to explain some discrepancies outlined in the 2018 Annual Report & Accounts in respect of the ultimate use of funds donated by the Group to the Charity. For further information see the Independent Review Committee Report in the 2018 Annual Report and Accounts.

Taking into account the conclusions of the IRC, as announced by the Group on 30 August 2019, and in absence of conclusive evidence that funds have not been used as intended, the Group has judged that it remains appropriate for it to present the amount of US\$9,500 thousand of its community support donations to the Charity during the comparative year ended 31 December 2018 as such and within operating expenses in the comparative year included in its consolidated financial statements. The Group has not made any further donations to the Charity since May 2018 and therefore no donations to the Charity are included in the table below for the financial year ended 31 December 2019.

In certain circumstances, the Group could be exposed to regulatory and other actions resulting in potential legal claims or penalties, fines or other liabilities. See Note 14 Commitments, contingencies and legal disputes on page 49 for further information.

Operating expenses for the year ended 31 December 2019 consisted of the following:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Cost of sales	581,743	507,939
Selling and distribution expenses	294,336	260,422
General and administrative expenses	66,036	45,246
Other operating expenses	26,328	30,863
Total operating expenses	968,443	844,470

Operating expenses include:

US\$000	Notes	Year ended 31.12.19	Year ended 31.12.18
Inventories recognised as an expense upon sale of goods		551,141	481,366
Employee costs (excl. logistics and bunker business)		101,770	79,471
Inventory movements		(2,673)	(34,801)
Depreciation of property, plant and equipment and right-of-use assets		81,240	61,377
Amortisation of intangible assets		890	718
Royalties and levies		30,506	29,742
Costs of logistics and bunker business		49,587	50,270
Audit and non-audit services		3,229	1,691
Community support donations	14/15	5,893	15,130
Write-offs		1,241	1,489
Losses on disposal of property, plant and equipment		417	5,701

Write-offs for the year ended 31 December 2019 primarily consisted of obsolete inventories and property, plant and equipment as outlined below:

US\$000	As at 31.12.19	As at 31.12.18
(Write-back)/Write-off of inventories	(103)	1,072
Write-off of property, plant and equipment	1,271	395
Write-off of receivables and prepayments	73	22
Total write-offs	1,241	1,489

Auditor remuneration

US\$000	Year ended 31.12.19	Year ended 31.12.18
Audit services		
Ferrexpo plc Annual Report	1,178	1,352
Additional fees charged by the previous auditor for the audit of the 2018 Ferrexpo plc Annual Report	1,834	–
Subsidiary entities	217	182
Total audit services	3,229	1,534
Audit-related assurance services	–	150
Total audit and audit-related assurance services	3,229	1,684
Non-audit services		
Other services	–	7
Total non-audit services	–	7
Total auditor remuneration	3,229	1,691

Auditor remuneration paid is in respect of the audit of the financial statements of the Group and its subsidiary companies and for the provision of other services not in connection with the audit.

Audit services for the year ended 31 December 2019 include US\$1,834 thousand relating to audit services provided by the previous audit firm of the Group for the comparative year ended 31 December 2018.

Note 6: Foreign exchange gains and losses

Foreign exchange gains and losses for the year ended 31 December 2019 consisted of the following:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Operating foreign exchange losses		
Revaluation of trade receivables	(47,229)	(4,922)
Revaluation of trade payables	523	(358)
Other	(46)	(15)
Total operating foreign exchange losses	(46,752)	(5,295)
Non-operating foreign exchange losses		
Revaluation of interest-bearing loans	(1,240)	95
Conversion of cash and cash equivalents	(4,255)	(801)
Other	(12,996)	(879)
Total non-operating foreign exchange losses	(18,491)	(1,585)
Total foreign exchange losses	(65,243)	(6,880)

The translation differences and foreign exchange gains and losses are predominantly dependent on the fluctuation of the exchange rate of the Ukrainian Hryvnia against the US Dollar. The table below shows the closing and average rates of the most relevant currencies of the Group compared to the US Dollar.

	Average exchange rates		Closing exchange rates	
	As at 31.12.19	As at 31.12.18	Year ended 31.12.19	Year ended 31.12.18
US\$				
UAH	25.846	27.200	23.686	27.688
EUR	0.893	0.847	0.893	0.874

Exchange differences arising on translation of non-US Dollar functional currency operations (mainly in Ukrainian Hryvnia) are included in the translation reserve.

Note 7: Net finance expense

Finance expense and income for the year ended 31 December 2019 consisted of the following:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Finance expense		
Interest expense on loans and borrowings	(33,589)	(43,468)
Less capitalised borrowing costs	14,617	8,125
Interest on defined benefit plans	(2,730)	(2,390)
Bank charges	(710)	(778)
Interest expense on lease liabilities	(630)	–
Other finance costs	(1,585)	(1,713)
Total finance expense	(24,627)	(40,224)
Finance income		
Interest income	1,379	843
Other finance income	57	49
Total finance income	1,436	892
Net finance expense	(23,191)	(39,332)

Note 8: Taxation**Critical judgements****Tax legislation in Ukraine**

The Group prices its sales between its subsidiaries using international benchmark prices for comparable products covering product quality and applicable freight costs. The Group judges these to be on terms which comply with applicable legislation. In August 2017, the State Fiscal Service of Ukraine (“SFS”) commenced a tax audit for the period from 1 September 2013 to 31 December 2015 at the Group’s major subsidiary in Ukraine with a focus on cross-border transactions in terms of its pellet sales to another subsidiary of the Group. Following the completion of this audit, the SFS issued its official tax audit report on 27 December 2018, claiming a tax adjustment totalling UAH448 million (US\$18,914 thousand as at 31 December 2019) and issued the formal claim on 12 March 2019. The Group’s subsidiary initiated legal proceedings and filed a claim to the first court instance in Poltava on 22 March 2019. The Poltava court of first court instance confirmed on 4 September 2019 the position of the Group’s major subsidiary. The SFS filed its appeal in November 2019 and the Second Administrative Court of Appeal confirmed on 21 December 2019 the decision of the first court instance and supported the position of the Group’s subsidiary in full. The SFS subsequently filed an application of cassation to the Supreme Court of Ukraine. As of the date of approval of these financial statements, the case has not yet been heard by the Supreme Court of Ukraine.

On 18 February 2020, the SFS commenced two new tax audits for cross-border transactions between the Group’s major subsidiary in Ukraine and the two other subsidiaries of the Group. The audits are covering transactions during the financial years 2015 to 2017 and 2016 to 2017, respectively.

The Group considers that it has complied with applicable legislation for all cross-border transactions undertaken and continues to expect that it can successfully defend its methodology applied to determine the prices between its subsidiaries. Consequently, no provision has been recorded as at 31 December 2019, neither for the years subject to the aforementioned court proceedings nor for transactions and years subject to the newly commenced audits by the SFS in Ukraine. As of the date of approval of these financial statements, no claim has been made by the SFS in respect of the newly commenced audits.

Upon the application of new interpretation IFRIC 23 *Uncertainty over income tax treatments* as of 1 January 2019 (see also Note 2 Basis of preparation for further information), the Group reviewed and reassessed its exposure in respect of the ongoing court proceedings and the newly commenced audits of cross-border transactions in Ukraine under the provisions of the new interpretation. Considering the two favourable court decisions and further third party advice obtained, the management of the Group concluded that it is probable that the last court instance will also rule in favour of the Group’s major subsidiary in Ukraine and that, if any new claims should be made by the SFS, the Group will continue to successfully defend its pricing methodology applied during these years. An unexpected outcome of the ongoing court proceeding would have an adverse impact on the Group’s tax expense and its tax rate in a future period.

The income tax expense for the year ended 31 December 2019 consisted of the following:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Current income tax		
Current income tax charge	52,106	44,086
Amounts related to previous years	10,297	(569)
Total current income tax	62,403	43,517
Deferred income tax		
Origination and reversal of temporary differences	(6,121)	13,284
Total deferred income tax	(6,121)	13,284
Total income tax expense	56,282	56,801

Tax effects on items recognised in the statement of other comprehensive income consisted of the following for the year ended 31 December 2019:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Tax effect of exchange differences arising on translating foreign operations	20,487	2,007
Total income tax effects recognised in statement of other comprehensive income	20,487	2,007

The weighted average statutory corporate income tax rate is calculated as the average of the statutory tax rates applicable in the countries in which the Group operates, weighted by the profits and losses before tax of the subsidiaries in the respective countries, as included in the consolidated financial information. The weighted average statutory corporate income tax rate was 11.3% for the financial year 2019 (2018: 15.5%). A reconciliation between the income tax charged in the accompanying financial information and income before taxes multiplied by the weighted average statutory tax rate for the year ended 31 December 2019 is as follows:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Profit before tax	459,575	392,022
Notional tax charge computed at the weighted average statutory tax rate of 11.3% (2018: 15.5%)	52,072	60,629
(Recognition)/derecognition of deferred tax assets ¹	(10,433)	(8,576)
Credit for Ukrainian fuel excise tax against income tax ²	(3,686)	(7,408)
Expenses not deductible for local tax purposes ³	2,539	3,795
Income exempted for local tax purposes	(25)	(56)
Reassessment of prior year temporary differences ⁴	4,911	7,719
Effect of different tax rates on local profit streams ⁵	646	1,157
Prior year adjustments to current tax ⁶	10,297	(569)
Effect from share of profit from associates ⁷	(783)	(974)
Other (including translation differences)	744	1,084
Total income tax expense	56,282	56,801

- 1 Recognition in 2019 primarily relates to the change of the tax law in Switzerland and is in connection with available transitional measures for companies losing the special tax status available under the old tax law. Recognition in 2018 relates to temporary differences arising from inflationary adjustments made in the past to the tax basis of property, plant and equipment for two Ukrainian subsidiaries. Both effects are considered to be of a non-recurring nature
- 2 Effective 1 January 2018, a temporary provision in the Ukrainian tax code allows a reduction in income tax payable for the amount of excise tax included in prices of fuel used for mining equipment. This provision still applies for 2020 and is considered to be of a recurring nature
- 3 Effect predominantly relates to expenses not deductible in Ukraine, which is expected to be recurring to a certain extent as a portion of operating expenses is historically not deductible for tax purposes according to the enacted local tax legislation
- 4 Effective 1 January 2019, the relevant accounting framework for tax purposes changed from local GAAP to IFRSs resulting in a reduction of temporary differences as of 31 December 2018 being of a non-recurring nature
- 5 Effect in 2019 and 2018 related to different tax rates applying to different income streams in Swiss subsidiaries as a result of their specific tax status. The effect is of a recurring nature
- 6 Effect in 2019 relates to a retrospective tax adjustment made for the financial year 2018 in respect of prices charged by the Ukrainian subsidiaries to the Group's sales companies in Switzerland and the United Arab Emirates and an allowance recognised on the reduction of the income tax payable for the amount of excise tax in 2018. The amount in 2018 related to final tax assessments received in Switzerland. These effects are considered to be of a non-recurring nature
- 7 Share of profit from associates is recognised net of taxes of the associates. This effect is of a recurring nature

The Group operates across a number of jurisdictions and its effective tax rate is subject to various factors outside of the Group's controls. This includes the volatility in the global iron ore pellet market and foreign exchange rate movements, primarily between the Ukrainian Hryvnia and the US Dollar. The effective tax rate of the financial year 2019 was 12.2% (2018: 14.5%), reflecting the appreciation of the Ukrainian Hryvnia against the US Dollar, negatively impacting the profitability of the Group's local subsidiaries, as well as lower global pellet premiums compared with 2018. The effective tax rate of the comparative year ended 31 December 2018 reflected strong pellet premiums in the Chinese spot market.

The Group expects that its future effective tax rate will be in a range of 11.0% to 16.0% depending on the aforementioned effects. As mentioned under critical judgements on page 43, the Group is involved in ongoing court proceedings in respect of its cross-border transactions and an unexpected adverse outcome would have an adverse impact on the Group's total income tax expense and its effective tax rate in the future. The Group's future effective tax rate could also be impacted by legislative changes and changes in the statutory tax rates in any of its key jurisdictions.

The net balance of income tax payable changed as follows during the financial year 2019:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Opening balance	(20,510)	(18,247)
Income statement charge	(62,403)	(43,517)
Booked through other comprehensive income	(20,487)	(2,007)
Tax paid	83,730	43,509
Translation differences	(1,394)	(248)
Closing balance	(21,064)	(20,510)

The net income tax payable as at 31 December 2019 consisted of the following:

US\$000	As at 31.12.19	As at 31.12.18
Income tax receivable balance	184	61
Income tax payable balance	(21,248)	(20,571)
Net income tax payable	(21,064)	(20,510)

Temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes and the recognition of available tax loss carry forwards result in the following deferred income tax assets and liabilities at 31 December 2019:

US\$000	As at 31.12.19	As at 31.12.18
Deferred tax assets	38,608	27,946
Deferred tax liabilities	(140)	(352)
Net income tax payable	38,468	27,594

The movement in the deferred income tax balance is as follows:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Opening balance	27,594	40,027
Income statement charge	6,121	(13,284)
Translation differences	4,753	851
Closing balance	38,468	27,594

As at 31 December 2019, the Group had available tax loss carry forwards in the amount of US\$112,889 thousand (2018: US\$92,654 thousand) for which no deferred tax assets were recognised. US\$76,411 thousand (2018: US\$59,883 thousand) are related to losses incurred in Ukraine and Austria and those losses do not expire. The remaining balance totalling US\$36,478 thousand (2018: US\$32,771 thousand) relates to losses incurred in Hungary, of which US\$23,627 thousand (2018: US\$22,923 thousand) expire after more than eight years.

No deferred tax liabilities have been recognised on temporary differences in the amount of US\$715,834 thousand (2018: US\$440,328 thousand) arising from undistributed profits from subsidiaries as no distributions are planned. Other temporary differences of US\$660 thousand have not been recognised as of 31 December 2019 (2018: US\$19,963 thousand), of which the vast majority relates to temporary differences on property, plant and equipment in Ukraine.

Note 9: Earnings per share and dividends paid and proposed

Distributable reserves

Ferrexpo plc (the "Company") is the Group's holding company, with no direct operating business, so its ability to make distributions to its shareholders is dependent on its ability to access profits held in the subsidiaries. The Group's consolidated retained earnings shown in the consolidated statement of changes in equity do not reflect the profits available for distribution in the Group as of 31 December 2019.

	Year ended 31.12.19	Year ended 31.12.18
Earnings for the year attributable to equity shareholders – per share in US cents		
Basic	68.6	56.9
Diluted	68.4	56.7
Profit for the year attributable to equity shareholders – US\$000		
Basic and diluted earnings	402,370	333,616
Weighted average number of shares – thousands		
Basic number of Ordinary Shares outstanding	586,715	586,117
Effect of dilutive potential Ordinary Shares	1,568	1,948
Diluted number of Ordinary Shares outstanding	588,283	588,065

Dividends proposed and paid

Prior to the dividend proposed below and taking into account relevant thin capitalisation rules and dividend-related covenants for the Group's major bank debt facilities, the total available distributable reserves of Ferrexpo plc is US\$201,647 thousand as of 31 December 2019 (2018: US\$167,611 thousand).

US\$000	Year ended 31.12.19
Dividends proposed	
Interim special dividend for 2019: 6.6 US cents per Ordinary Share	38,736
Total dividends proposed	38,736

The interim special dividend for 2019 was declared on 2 January 2020 and paid on 17 January 2020.

US\$000	Year ended 31.12.19
Dividends paid during the year	
Interim dividend for 2019: 6.6 US cents per Ordinary Share	38,621
Final dividend for 2018: 6.6 US cents per Ordinary Share	38,621
Final special dividend for 2018: 6.6 US cents per Ordinary Share	38,847
Interim special dividend for 2018: 6.6 US cents per Ordinary Share	38,833
Total dividends paid during the year	154,922

Although accounts are published in US Dollars and dividends are declared in US Dollars, the shares are denominated in UK Pounds Sterling and dividends are therefore paid in UK Pounds Sterling.

US\$000	Year ended 31.12.18
Dividends proposed	
Final ordinary dividend for 2018: 6.6 US cents per Ordinary Share	38,695
Final special dividend for 2018: 6.6 US cents per Ordinary Share	38,695
Interim special dividend for 2018: 6.6 US cents per Ordinary Share	38,695
Total dividends proposed	116,085

US\$000	Year ended 31.12.18
Dividends paid during the year	
Interim dividend for 2018: 3.3 US cents per Ordinary Share	19,376
Final dividend for 2017: 3.3 US cents per Ordinary Share	18,929
Special dividend for 2017: 6.6 US cents per Ordinary Share	38,615
Special dividend for 2017: 3.3 US cents per Ordinary Share	19,639
Total dividends paid during the year	96,559

Note 10: Leases

As at 31 December 2019, the net book value of the right-of-use assets included in the consolidated statement of financial position and the associated depreciation charge included in the consolidated income statement comprised:

US\$000	Exploration and evaluation	Land	Mining assets	Buildings and tailings dam	Vessels	Plant and equipment	Vehicles	Fixtures and fittings	Assets under construction	Total
Net book value at:										
At 1 January 2019	–	1,907	–	5,683	–	1,881	94	17	–	9,582
At 31 December 2019	–	2,244	–	4,665	–	4,003	52	12	–	10,976
<i>Depreciation charge:</i>										
Year ended 31 December 2019	–	2,159	–	1,217	–	1,843	41	5	–	5,265

During the year ended 31 December 2019, the additions to right-of-use assets totalled US\$7,222 thousand.

Leased assets and assets under hire purchase contracts are pledged as security for the related finance leases and hire purchase liabilities.

As at 31 December 2019, the carrying amount of the lease liabilities consisted of the following:

US\$000	Note	Year ended 31.12.19	At 1 January 2019
Non-current	13	6,580	4,799
Current	13	3,540	4,976

The total cash outflow for leases falling under the scope of IFRS 16 *Leases* during the year ended 31 December 2019 was US\$5,982 thousand. During the year ended 31 December 2019, US\$425 thousand was recognised as an expense in the consolidated income statement in respect of short-term leases with a corresponding impact on the net cash flows from operating activities. Furthermore, interest expense on lease liabilities in the amount of US\$630 thousand was recognised in the consolidated income statement during the year ended 31 December 2019.

For further information on the impact of the first-time adoption of the new standard IFRS 16 *Leases*, including the impact on the consolidated income statement as at 31 December 2019, see Note 2 Basis of preparation and Note 14 Commitments, contingencies and legal disputes in terms of lease-related commitments, including the Group's operating lease commitments at the end of the comparative year ended 31 December 2018 accounted for under the old standard IAS 17 *Leases*.

Note 11: Inventories

Critical estimates

Lean and weathered ore

Iron ore of various grades is being extracted at the Group's two operating mines GPL and Yerstivske. In order to maximise the operational efficiency and output of the processing facility at FPM, management determines the optimal mix and grade of ore to be delivered to the processing facility from each mine. During the last financial years, ore of a lower iron content was stockpiled due to limited processing capacities.

It is the Group's intention to process the stockpiled ore once additional processing capacities are available. This additional capacity is currently being constructed and expected to be completed in the second half of the financial year 2020 and, as a consequence, a portion of the balance has been reclassified to current.

As at 31 December 2019, the stockpiled ore valued at cost totalled US\$257,252 thousand (2018: US\$217,688 thousand). Critical estimates in determining the net realisable value of lean and weathered ore include: i) utilisation of the ore over the period from 2020 to 2034, representing an average of 10% of total available processing capacity, and using an asset specific WACC based pre-tax discount rate of 14.5%; and ii) forecast long-term iron ore prices of US\$91.7 per tonne of 65% Fe fines CFR North China.

The net realisable value of lean and weathered ore is most sensitive to delays in the commencement of utilising the ore in the production process, which depends on the completion of the capacity upgrade programme at FPM. Two separate stress tests assuming a one-year delay and a US\$5 per tonne lower forecast long-term iron ore price would result in a reduction in the net realisable value of US\$36,500 thousand and US\$39,600 thousand, respectively.

At 31 December 2019, inventories comprised:

US\$000	As at 31.12.19	As at 31.12.18
Lean and weathered ore	2,226	–
Raw materials and consumables	43,008	39,083
Spare parts	81,782	56,873
Finished ore pellets	59,010	43,097
Work in progress	11,393	3,153
Other	2,295	2,713
Total inventories – current	199,714	144,919
Lean and weathered ore	255,026	217,688
Total inventories – non-current	255,026	217,688
Total inventories	454,740	362,607

Inventories classified as non-current mainly comprise lean and weathered ore that are, based on the Group's current processing plans, not planned to be processed within the next year. It is the Group's intention to process this ore at a later point of time and it is expected that it will take more than one year to process this stockpile, depending on the Group's future mining activities, processing capabilities and anticipated market conditions.

Note 12: Cash and cash equivalents

As at 31 December 2019, cash and cash equivalents comprised:

US\$000	As at 31.12.19	As at 31.12.18
Cash at bank and on hand	131,020	62,996
Total cash and cash equivalents	131,020	62,996

The debt repayments during the financial year ended 31 December 2019 totalled US\$229,374 thousand (2018: US\$308,817 thousand) affecting the balance of cash and cash equivalents. Further information on the Group's gross debt is provided in Note 13 Interest-bearing loans and borrowings.

The balance of cash and cash equivalents held in Ukraine amounts to US\$28,351 thousand as at 31 December 2019 (2018: US\$21,416 thousand).

Note 14 Commitments, contingencies and legal disputes provides details on the Group's balance of restricted cash and deposits, which has been fully provided for during the financial years 2015 and 2016 as not available to the Group.

Note 13: Interest-bearing loans and borrowings

This note provides information about the contractual terms of the Group's major finance facilities.

US\$000	Notes	As at 31.12.19	As at 31.12.18
Current			
Eurobond issued		–	172,454
Syndicated bank loans – secured		133,333	–
Other bank loans – secured		–	9,262
Other bank loans – unsecured		1,494	1,494
Lease liabilities	14	3,540	2,074
Trade finance facilities		–	19,316
Total current interest-bearing loans and borrowings		138,367	204,600
Non-current			
Syndicated bank loans – secured		266,667	195,000
Other bank loans – secured		–	–
Other bank loans – unsecured		764	2,258
Lease liabilities	14	6,580	–
Total non-current interest-bearing loans and borrowings		274,011	197,258
Total interest-bearing loans and borrowings		412,378	401,858

At 31 December 2019, the Group has a syndicated revolving US\$400,000 thousand pre-export finance facility, which is fully drawn. As at the end of the comparative year ended 31 December 2018, US\$205,000 thousand were available and US\$195,000 thousand were drawn by the Group. The initial facility agreement for a total amount of US\$195,000 thousand was signed on 16 November 2017 and fully drawn in March 2018. In August 2018, an amendment to the aforementioned facility agreement was signed, increasing the facility from US\$195,000 thousand to US\$400,000 thousand and extending the tenor by one year. The effective date of the increase and extension was 6 November 2018. Following a one-year grace period, the facility will be amortised in 12 quarterly instalments, with the first instalment due on 7 February 2020 and the final repayment due on 6 November 2022.

The aforementioned bank debt facility was guaranteed and secured as follows:

- Ferrexpo AG and Ferrexpo Middle East FZE, which are also joint borrowers, assigned the rights to revenue from certain sales contracts;
- PJSC Ferrexpo Poltava Mining assigned all of its rights of certain export contracts for the sale of pellets to Ferrexpo AG and Ferrexpo Middle East FZE; and
- the Group pledged bank accounts of Ferrexpo AG and Ferrexpo Middle East FZE into which sales proceeds from certain assigned sales contracts are exclusively received.

As at the end of the comparative year ended 31 December 2018, the Group had outstanding unsecured Notes at par value totalling US\$173,181 thousand in addition to the major bank debt facility listed above. The final payment was made on 7 April 2019. The Notes had a 10.375% interest coupon payable semi-annually.

As at 31 December 2019, the Group had no open trade finance facilities (2018: US\$19,316 thousand). Trade finance facilities are secured against receivable balances related to these specific trades.

The outstanding unsecured Notes were shown net of associated arrangement fees while for the revolving syndicated pre-export finance facility, fees are presented in prepayments and current assets and other non-current assets based on the maturity of the underlying facility and are amortised over the term of the facility.

The table below shows the movements in the interest-bearing loans and borrowings:

US\$000	Notes	Year ended 31.12.19	Year ended 31.12.18
Opening balance of interest-bearing loans and borrowings		401,858	491,706
<i>Cash movements</i>			
Repayments of Eurobond issued		(173,181)	(173,181)
Proceeds from syndicated bank loans – secured		225,000	195,000
Repayments of syndicated bank loans – secured		(20,000)	(112,500)
Repayments of other bank loans – secured		(9,560)	(17,189)
Repayments of other bank loans – unsecured		(1,717)	(1,512)
Principal and interest elements of lease payments		(5,600)	(3,753)
Change of trade finance facilities, net		(19,316)	19,288
Total cash movements		(4,374)	(93,847)
<i>Non-cash movements</i>			
Amortisation of prepaid arrangement fees		1,462	4,696
First-time adoption IFRS 16	2	7,701	–
Additions to lease liabilities		5,297	–
Others (incl. translation differences)		434	(697)
Total non-cash movements		14,894	3,999
Closing balance of interest-bearing loans and borrowings		412,378	401,858

Note 14: Commitments, contingencies and legal disputes

Commitments

Commitments as at 31 December 2019 consisted of the following:

US\$000	Year ended 31.12.19	Year ended 31.12.18
Total commitments for the lease of mining land (out of the scope of IFRS 16)	29,910	30,724
Total future contingent rental payments (IFRS 16)	15,068	5,704
Total capital commitments on purchase of property, plant and equipment	116,509	67,529

Commitments before first-time adoption of IFRS 16 Leases as of 1 January 2019

For further information on the impact of the first-time adoption of this new standard see Note 2 Basis of preparation.

Operating lease commitments

Operating leases commitments as at the end of the comparative year 31 December 2018 consisted of the following:

US\$000	Year ended 31.12.18
Less than one year	2,807
Between one and five years	4,587
More than five years	1,433
Total operating lease commitments	8,827

During the comparative year ended 31 December 2018, US\$2,903 thousand was recognised as an expense in the income statement in respect of operating leases.

Finance lease commitments

Future minimum lease payments under finance leases together with the present value of the net minimum lease payments were as follows as at the end of the comparative year ended 31 December 2018:

US\$000	As at 31.12.18	
	Minimum payments	Present value of payments
Less than one year	2,267	2,074
Total minimum lease payments	2,267	2,074
Less: amounts representing finance charges	(193)	–
Present value of minimum lease payments	2,074	2,074

Contingencies

On 4 February 2019, the Group announced that it had commissioned an independent review (the “Independent Review”) into the Group’s relationship with third party charity fund Blooming Land (the “Charity”) and the use of the total funds of US\$110,000 thousand donated by the Group to the Charity during the financial years 2013 to 2018, of which US\$9,500 thousand during the comparative year ended 31 December 2018.

The Group may be exposed to the risk of civil, criminal or regulatory actions and liabilities in relation to matters considered by the Independent Review.

Whilst a significant amount of work has been undertaken in connection with the Independent Review by the Independent Review Committee (“IRC”) and its advisers, it has not been possible to explain some discrepancies outlined in the 2018 Annual Report & Accounts in respect of the ultimate use of funds donated by the Group to the Charity.

After careful consideration of the report received from its advisers together with the work of the IRC itself, the IRC announced on 30 August 2019 that it is satisfied that none of the Group’s Directors, management or employees have had any involvement in any possible misappropriation of funds by the Charity. At the same time, the IRC reaffirmed its conclusion that the Charity is not a related party of the Group, Kostyantyn Zhevago (the Group’s previous Chief Executive Officer and a controlling shareholder of Ferrexpo plc) or its executive management, as defined under applicable accounting standards or Chapter 11 of the UK Listing Rules. For further information see Independent Review Committee Report in the 2018 Annual Report and Accounts.

If any of the critical judgements outlined in Note 5 Operating expenses and/or Note 15 Related party disclosures and/or the conclusions of the IRC are incorrect, in whole or in part, including as a result of information not currently known to the Group, or new information becomes available, which enables the Group to form conclusions, which were not or could not be reached by the IRC, liabilities (including fines and penalties) may accrue to the Group. At the current time, the existence, timing and quantum of potential future liability, if any, including fines, penalties or damages, which could be material or other consequences arising from the Independent Review cannot be determined and measured reliably and, as a consequence, no associated liabilities have been recognised in relation to these matters in the consolidated statement of financial position as of 31 December 2019.

The Board is currently making enquiries into a loan relationship between related parties of the Group involving FC Vorskla. If it transpires that any of the payments made by the Group to FC Vorskla or the loan provided by FC Vorskla to Collaton Limited were not used for the legitimate purposes of the football club in Ukraine, or there has been any non-compliance with legal, regulatory or other requirements, liabilities (including fines and penalties) may accrue to the Group. At the current time, the existence, timing or quantum of potential future liability, if any, including fines, penalties or damages, which could be material, or other consequences arising from the payments made by the Group to FC Vorskla, cannot be determined and measured reliably and, as a consequence, no associated liabilities have been recognised in relation to these matters in the consolidated statement of financial position as of 31 December 2019. See Note 15 Related party disclosures for further information.

Legal

In the ordinary course of business, the Group is subject to legal actions and complaints. Management believes that the ultimate liability, if any, arising from such actions or complaints will not have a material adverse effect on the financial condition or the results of future operations of the Group.

Deposit Guarantee Fund and liquidator of Bank F&C

The Group’s former transactional bank in Ukraine, Bank F&C (“BFC”), is still going through the liquidation process after having been declared insolvent by the National Bank of Ukraine and put under temporary administration on 18 September 2015. The Group, through its major subsidiaries in Ukraine, is engaged in various court proceedings with the aim to maximise its recovery in the liquidation process of BFC as disclosed below.

Following the commencement of the liquidation process of BFC and in accordance with the applicable local legislation, PJSC Ferrexpo Poltava Mining (“FPM”), LLC Ferrexpo Yeristovo Mining (“FYM”) and LLC Ferrexpo Belanovo Mining (“FBM”), collectively referred to as “Ukrainian subsidiaries”, submitted on 21 January 2016 their claims for cash and deposit balances held with BFC on the date of introduction of temporary administration totalling UAH4,262 million (US\$179,936 thousand as of 31 December 2019).

On 22 April 2016, the liquidator of BFC issued certificates recognising UAH540 million (US\$22,798 thousand as of 31 December 2019) of these claims and recognised these claims in the ninth rank. The aforementioned Ukrainian subsidiaries are still involved in legal proceedings in respect of the under-recognition of the claims amounting to UAH3,722 million (US\$157,138 thousand as of 31 December 2019) and the ranking of the claims in the liquidation process.

The court proceedings commenced in October 2016 and, following various hearings during the financial year 2017, the relevant court instance dismissed on 25 October 2017 FPM’s claim in full. FPM filed an appeal on 13 November 2017 and several hearings took place following the filing of FPM’s appeal without a ruling on the parties’ motions by the Kyiv Commercial Court of Appeal. During the hearing on 18 July 2018, the court ruled in favour of FPM and the counterparty subsequently filed its cassation appeal against this decision. On 11 December 2018, the Supreme Court of Ukraine upheld the cassation appeal and the case was directed for new consideration to the Northern Commercial Court of Appeal. On 19 June 2019, the Northern Commercial Court of Appeal satisfied the claim of FPM and the opposing party filed a cassation appeal. On 31 October 2019, the Supreme Court cancelled the decision of the Northern Commercial Court of Appeal and directed the case to this court instance for new consideration. The hearing by the Northern Commercial Court of Appeal was scheduled to take place on 17 March 2020, but did

not take place and was postponed and the new date is currently unknown. FYM's claim on the same matter was dismissed by the Kyiv Commercial Court on 6 February 2019 and FYM filed its appeal against this decision on 28 February 2019. On 20 May 2019, the Northern Commercial Court of Appeal dismissed the appellate claim of FYM in full and FYM filed its cassation claim on 18 June 2019. On 20 August 2019, the Supreme Court upheld the appeal of FYM and directed the case to the court of first instance for new consideration. The hearing by Kyiv Commercial Court is scheduled to take place on 19 March 2020. In relation to the claims of FBM, the Northern Commercial Court of Appeal dismissed FBM's appeal on 11 March 2019 and FBM filed its cassation appeal on 2 April 2019. On 19 June 2019, the Supreme Court of Ukraine dismissed the cassation appeal of FBM.

The outcomes of the aforementioned legal proceedings will not have an adverse impact on the Group's financial result in future periods as a full allowance was recorded for the claimed amounts during the financial year 2015.

In relation to the aforementioned insolvency of BFC, an investigating judge of the Pecherskyi District Court of Kyiv City granted in November 2019 an order to arrest (freeze) certain assets in connection with the investigation involving Kostyantyn Zhevago and BFC (the "Order"). The assets subject to the Order include 50.3% of Ferrexpo AG's ("FAG") shareholding in FPM. FAG filed an appeal against the Order and the hearing before the Court of Appeal is scheduled for 2 April 2020.

Based on legal advice received, the Board of Ferrexpo expects that an appeal should be successful as the Order has no proper or reasonable basis under Ukrainian law. The Order does not affect ownership of the shares in FPM, but prohibits their transfer, and has had no impact on the operations of the Group. As the possibility of an outflow of economic resources is considered to be remote, the Order does not constitute a contingent liability.

Note 15: Related party disclosures

During the years presented, the Group entered into arm's length transactions with entities under the common control of Kostyantyn Zhevago, a controlling shareholder of Ferrexpo plc, with associated companies and with other related parties. Management considers that the Group has appropriate procedures in place to identify, control, properly disclose and obtain independent confirmation, when relevant, for transactions with the related parties.

Entities under common control are those under the control of Kostyantyn Zhevago. Associated companies refer to TIS Ruda LLC, in which the Group holds an interest of 49.9% (2018: 49.5%). This is the only associated company of the Group.

Critical judgements

Completeness

In the course of the preparation of the consolidated financial statements of the Group for previous financial years, the Board concluded that neither Kostyantyn Zhevago (the Group's previous Chief Executive Officer and a controlling shareholder of Ferrexpo plc) nor the Group's executive management control or exercise significant influence over Blooming Land or its sub-funds (the "Charity") pursuant to relevant accounting standards IFRS 10 *Consolidated financial statements* and IAS 28 *Investments in joint ventures and associates* or under Chapter 11 of the UK Listing Rules. During the comparative year ended 31 December 2018, the Group made donations of US\$9,500 thousand to the Charity. The donations were ceased in May 2018 and no donations were made in the year ended 31 December 2019.

After a significant amount of work undertaken by the Independent Review Committee ("IRC") and its advisers during the financial year 2019, the IRC reaffirmed its conclusion that the Charity is not a related party of the Group, Kostyantyn Zhevago (the Group's previous Chief Executive Officer and the controlling shareholder of Ferrexpo plc) or its executive management, as defined under applicable accounting standards or Chapter 11 of the UK Listing Rules. Nevertheless, the Group may, under certain circumstances, be exposed to regulatory and other actions resulting in potential legal claims or penalties, fines or other liabilities. See Note 14 Commitments, contingencies and legal disputes on page 49 in respect of the Group's potential exposures under certain circumstances.

Related party transactions entered into by the Group during the years presented are summarised in the following tables:

Revenue, expenses, finance income and expense

	Year ended 31.12.19			Year ended 31.12.18		
	Entities under common control	Associated companies	Other related parties	Entities under common control	Associated companies	Other related parties
US\$000						
Other sales ^a	1,152	–	14	877	–	111
Total related party transactions within revenue	1,152	–	14	877	–	111
Materials ^b	7,913	–	–	8,429	–	3
Spare parts and consumables ^c	4,537	–	–	2,959	–	–
Total related party transactions within cost of sales	12,450	–	–	11,388	–	3
Selling and distribution expenses ^d	10,824	18,477	–	10,702	19,138	702
General and administration expenses ^e	1,650	–	393	788	–	529
Finance expense	19	–	–	119	–	–
Total related party transactions within expenses	24,943	18,477	393	22,997	19,138	1,234
Other income ^f	319	–	–	–	–	–
Total related party transactions	26,414	18,477	407	23,874	19,138	1,345

A description of the most material transactions, which are in aggregate over US\$200 thousand in the current or comparative year is given below.

Entities under common control

The Group entered into various related party transactions with entities under common control. All transactions were carried out on an arm's length basis in the normal course of business.

- a Sales of power, steam and water and other materials for US\$113 thousand (2018: US\$109 thousand) and income from premises leased to Kislorod PCC of US\$76 thousand (2018: US\$131 thousand);
- a Sales of diesel to DVD Trans totalling US\$322 thousand (2018: US\$376 thousand). The company ceased to be a related party in September 2018; in accordance with the Listing Rules, all transactions with DVD Trans within one year from cessation are still considered as related party transactions and disclosed as such; and
- a Sales of scrap metal to OJSC Uzhgorodsky Turbogaz totalling US\$239 thousand (2018: US\$250 thousand).
- b Purchases of compressed air and oxygen and scrap metal from Kislorod PCC for US\$3,645 thousand (2018: US\$4,536 thousand);
- b Purchases of cast iron balls from AutoKraZ Holding Co. for US\$274 thousand during the comparative year ended 31 December 2018. No such purchases during the year ended 31 December 2019; and
- b Purchases of cast iron balls from OJSC Uzhgorodsky Turbogaz for US\$4,194 thousand (2018: US\$3,536 thousand).
- c Purchases of spare parts from CJSC Kyiv Shipbuilding and Ship Repair Plant ("KSRSSZ") in the amount of US\$963 thousand (2018: US\$1,201 thousand);
- c Purchases of spare parts from OJSC Uzhgorodsky Turbogaz in the amount of US\$436 thousand (2018: US\$533 thousand);
- c Purchases of spare parts from Valsa GTV of US\$1,165 thousand (2018: US\$455 thousand); and
- c Purchases of spare parts from OJSC Berdichev Machine-Building Plant Progress of US\$1,931 thousand (2018: US\$724 thousand).
- d Purchases of advertisement, marketing and general public relations services from FC Vorskla of US\$10,824 thousand (2018: US\$10,702 thousand). See page 53 in respect of a loan relationship between FC Vorskla and another related party.
- e Insurance premiums of US\$1,156 thousand (2018: US\$535 thousand) paid to ASK Omega for workmen's insurance and other insurances; and
- e Purchase of marketing services from TV & Radio Company of US\$296 thousand (2018: US\$100 thousand).
- f Other income is related to payments of US\$319 thousand received from ASK Omega in respect of a claims made under insurance policies in place (2018: nil).

Associated companies

The Group entered into related party transactions with its associated company, TIS Ruda LLC, which were carried out on an arm's length basis in the normal course of business for the members of the Group.

- d Purchases of logistics services in the amount of US\$18,477 thousand (2018: US\$19,138 thousand) relating to port operations, including port charges, handling costs, agent commissions and storage costs.

Other related parties

The Group entered into various transactions with related parties other than those under the control of a controlling shareholder of Ferrexpo plc. All transactions were carried out on an arm's length basis in the normal course of business.

- d Purchases of logistics management services from Slavutich Ruda Ltd. relating to customs clearance services and the coordination of rail transit totalling US\$702 thousand in the comparative year ended 31 December 2018. Effective 20 April 2018, this company is no longer a related party.
- e Legal services in the amount of US\$362 thousand (2018: US\$375 thousand) provided by Kuoni Attorneys at Law Ltd., which is controlled by a former member of the Board of Directors of Ferrexpo plc who resigned in November 2016, but still acts as a member of the Board of Directors of one of the subsidiaries of the Group and also received Directors' fees of US\$100 thousand (2018: US\$100 thousand).

Purchases of property, plant and equipment

The table below details the transactions of a capital nature, which were undertaken between Group companies and entities under common control, associated companies and other related parties during the years presented.

	Year ended 31.12.19			Year ended 31.12.18		
	Entities under common control	Associated companies	Other related parties	Entities under common control	Associated companies	Other related parties
US\$000						
Purchases in the ordinary course of business	8,935	—	—	4,678	—	—
Total purchases of property, plant and equipment	8,935	—	—	4,678	—	—

During the year ended 31 December 2019, the Group purchased major spare parts and equipment from OJSC Berdichev Machine-Building Plant Progress totaling US\$6,910 thousand (2018: US\$2,821 thousand) in respect of the construction of the concentrate stockyard, from CJSC Kyiv Shipbuilding and Ship Repair Plant ("KSRSSZ") totalling US\$816 thousand (2018: US\$67 thousand) for several ongoing major projects, including the construction of the concentrate stockyard, the upgrade of beneficiation sections and the refurbishment of the pellet loading area. The balance of the comparative year ended 31 December 2018 included purchases from AutoKraZ Holding Co. totaling US\$398 thousand for cranes and lifters installed on truck chassis and from Valsa GTV totaling US\$212 thousand for rubber-lined steel cover sheets for the mills.

The Group further procured services relating to the top soil removal and relocation of waste material and gravel in the amount of US\$861 thousand (2018: US\$1,165 thousand) from DVD Trans. The company ceased to be a related party in September 2018; in accordance with the Listing Rules, all transactions with DVD Trans within one year from the cessation are still considered as related party transactions and disclosed as such.

The FPM Charity Fund owns 75% of the Sport & Recreation Centre (“SRC”) in Horishni Plavni and made contributions totalling US\$129 thousand during the year ended 31 December 2019 (2018: US\$199 thousand) for the construction and maintenance of the building, including costs related to electricity, gas and water consumption. The remaining stake of 25% is owned by JSC F&C Realty, which is under the control of Kostyantyn Zhevago.

Balances with related parties

The outstanding balances, as a result of transactions with related parties, for the years presented are shown in the table below:

US\$000	As at 31.12.19			As at 31.12.18		
	Entities under common control	Associated companies	Other related parties	Entities under common control	Associated companies	Other related parties
Prepayments for property, plant and equipment ^f	1,093	–	–	6,121	–	–
Total non-current assets	1,093	–	–	6,121	–	–
Trade and other receivables ^g	104	2,472	2	214	1,302	1
Prepayments and other current assets ^h	1,662	–	–	1,181	–	–
Total current assets	1,766	2,472	2	1,395	1,302	1
Trade and other payables ⁱ	1,001	898	–	465	963	–
Accrued and contract liabilities	–	–	1	–	–	–
Total current liabilities	1,001	898	1	465	963	–

A description of the balances over US\$200 thousand in the current or comparative year is given below.

Entities under common control

f As at 31 December 2019, prepayments for property, plant and equipment totalling US\$1,052 thousand (2018: US\$5,980 thousand) were made to OJSC Berdichev Machine-Building Plant Progress.

h Prepayments and other current assets totalling US\$921 thousand as at 31 December 2019 related to prepayments made to FC Vorskla for advertisement, marketing and general public relations services (2018: US\$858 thousand) and US\$605 thousand to ASK Omega for insurance premiums (2018: US\$124 thousand).

i Trade and other payables included US\$246 thousand (2018: US\$213 thousand) related to the purchase of compressed air, oxygen and scrap metal from Kislorod PCC and US\$418 thousand (2018: US\$21 thousand) related to the purchase of spare parts from OJSC Berdichev Machine-Building Plant Progress.

Associated companies

g As at 31 December 2019, trade and other receivables included US\$2,472 thousand (2018: US\$1,302 thousand) related to dividends declared by TIS Ruda LLC.

i As at 31 December 2019, trade and other payables included US\$898 thousand (2018: US\$963 thousand) related to purchases of logistics services from TIS Ruda LLC.

Loan relationship between related parties of the Group

The Group has supported FC Vorskla with sponsorship for many years. FC Vorskla is a professional football club in Poltava, Ukraine that competes in the Ukrainian Premier League. The Group’s sponsorship provides brand recognition for the Group both within Ukraine and internationally, and in addition given FC Vorskla’s proximity to the Group’s operations, provides benefit to the local community surrounding the mines.

The sponsorship payments are made by Ferrexpo Middle East FZE to two entities: FC Vorskla Cyprus Limited, a company incorporated in the Republic of Cyprus, and Football Club “Vorskla” LLC, a company incorporated in Ukraine (together, “FC Vorskla”). During the financial year 2019, the Group made total payments to FC Vorskla of US\$10,824 thousand (2018: US\$10,702 thousand) for advertisement, marketing and general public relations services. FC Vorskla is considered to be a related party of the Group as Kostyantyn Zhevago, the Group’s previous Chief Executive Officer and a controlling shareholder of Ferrexpo plc, controls FC Vorskla and is the honorary president. The payments made to FC Vorskla were considered to be in the ordinary course of business.

In January 2020, the Group received the audited financial statements of FC Vorskla for the financial year 2017, which showed that FC Vorskla had provided a loan in the amount of US\$3,990 thousand to another related party, Collaton Limited, which is controlled by Kostyantyn Zhevago.

Based on the audited financial statements of FC Vorskla for the financial year 2018, received by the Group in March 2020, the loan to Collaton Limited had increased to US\$10,809 thousand as at 31 December 2018. In absence of the availability of the audited financial statements of FC Vorskla for the financial year 2019, the Group received unaudited management accounts showing a further increase in the loan to US\$16,978 thousand as at 31 December 2019.

Following the identification of the loan provided by FC Vorskla to Collaton Limited, the Board has taken steps to obtain further information in relation to the arrangements, and has engaged third party advisers to assess the situation.

As of the date of approval of these financial statements, the Board’s enquiries remain ongoing. Based on the responses received to date from FC Vorskla, the Group understands that the loan to Collaton Limited was made in connection with the construction and renovation of certain sports facilities of FC Vorskla, including its central stadium and training facilities in Poltava. Collaton Limited has not provided information requested by the Group to confirm the usage of the funds provided to it by FC Vorskla. Given that the enquiries by the Board and its advisers remain ongoing, the Board is unable to conclude at this stage whether the payments made to FC Vorskla have been used in their entirety for the legitimate purposes of the football club in Ukraine. If it

transpires that any of the payments made by the Group to FC Vorskla or the loan provided by FC Vorskla to Collaton Limited were not used for the legitimate purposes of the football club in Ukraine, or there has been any non-compliance with legal, regulatory or other requirements, liabilities (including fines and penalties) may accrue to the Group. See also Note 14 Commitments, contingencies and legal disputes.

Note 16: Events after the reporting period

No material adjusting or non-adjusting events have occurred subsequent to the year end other than the proposed dividend disclosed in Note 9 Earnings per share and dividends paid and proposed.

ALTERNATIVE PERFORMANCE MEASURES

When assessing and discussing the Group's reported financial performance, financial position and cash flows, management may make reference to Alternative Performance Measures ("APMs") that are not defined or specified under International Financial Reporting Standards ("IFRSs").

APMs are not uniformly defined by all companies, including those in the Group's industry. Accordingly, the APMs used by the Group may not be comparable with similarly titled measures and disclosures made by other companies. APMs should be considered in addition to, and not as a substitute for or as superior to, measures of financial performance, financial position or cash flows reported in accordance with IFRSs.

Ferrexpo makes reference to the following APMs in the 2019 Annual Report.

C1 cash cost of production

Definition: Non-financial measure, which represents the cash costs of production of iron pellets from own ore divided by production volume of own production ore. Non-C1 cost components include non-cash costs such as depreciation, inventory movements and costs of purchased ore and concentrate. The Group presents the C1 cash cost of production because it believes it is a useful operational measure of its cost competitiveness compared to its peer group.

US\$000	As at 31.12.19	As at 31.12.18
C1 cash costs	502,887	454,560
Non-C1 cost components	48,245	26,800
Cost of sales – pellet production	551,132	481,360
Own ore produced (tonnes)	10,518,954	10,506,164
C1 cash cost per tonne (US\$)	47.8	43.3

Underlying EBITDA

Definition: The Group calculates the underlying EBITDA as profit before tax and finance plus depreciation and amortisation, net gains and losses from disposal of investments and property, plant and equipment, share-based payments and write-offs and impairment losses. The underlying EBITDA is presented because it is a useful measure for evaluating the Group's ability to generate cash and its operating performance. See Note 5 Segment information for further details.

Closest equivalent IFRSs measure: Profit before tax and finance.

Rationale for adjustment: The Group presents the underlying EBITDA as it is a useful measure for evaluating its ability to generate cash and its operating performance. Also it aids comparability across peer groups as it is a measurement that is often used.

Reconciliation to closest IFRSs equivalent:

US\$000	Notes	As at 31.12.19	As at 31.12.18
Underlying EBITDA		586,067	502,897
Losses on disposal of property, plant and equipment		(417)	(5,701)
Share-based payments		(1,022)	(674)
Write-offs	5	(1,241)	(1,489)
Depreciation and amortization		(82,130)	(62,094)
Profit before tax and finance		501,257	432,939

Diluted earnings per share

Definition: Earnings per share calculated using the diluted number of Ordinary Shares outstanding.

Closest equivalent IFRSs measure: Diluted earnings per share.

Rationale for adjustment: Excludes the impact of special items that can mask underlying changes in performance.

Reconciliation to closest IFRSs equivalent:

	Year ended 31.12.19	Year ended 31.12.18
Earnings for the year attributable to equity shareholders - per share in US cents		
Basic	68.6	56.9
Diluted	68.4	56.7

Net debt to underlying EBITDA

Definition: Net debt divided by the underlying EBITDA (for the last 12 months):

	As at 31.12.19	As at 31.12.18
Net debt (US\$000)	(281,358)	(338,862)
Underlying EBITDA (US\$000)	586,067	502,897
Net debt to underlying EBITDA	0.48x	0.67x

Net debt as at 31 December 2019 included an effect of US\$7,108 thousand as a result of the first-time application of the new standard IFRS 16 *Leases*. For further information on the impact of the adoption of the new standard IFRS 16 *Leases* see Note 2 Basis of preparation.

Rationale for adjustment: The ratio is a measurement of the underlying EBITDA Group's leverage, calculated as a company's interest-bearing liabilities minus cash or cash equivalents, divided by its underlying EBITDA.

Reconciliation to net debt:

US\$000	Notes	As at 31.12.19	As at 31.12.18
Cash and cash equivalents	12	131,020	62,996
Interest-bearing loans and borrowings – current	13	(138,367)	(204,600)
Interest-bearing loans and borrowings – non-current	13	(274,011)	(197,258)
Net debt		(281,358)	(338,862)

For a reconciliation of underlying EBITDA to profit before tax and finance see page 39.

Capital investment

Definition: Capital expenditure for the purchase of property, plant and equipment and intangible assets.

Closest equivalent IFRSs measure: Purchase of property, plant and equipment and intangible assets (net cash flows used in investing activities).

Rationale for adjustment: The Group presents the capital investment as it is a useful measure for evaluating the degree of capital invested in its business operations.

Reconciliation to closest IFRSs equivalent:

US\$000	As at 31.12.19	As at 31.12.18
Purchase of property, plant and equipment and intangible assets (net cash flows used in investing activities)	247,478	135,113

Total liquidity

Definition: Sum of cash and cash equivalents and available facilities.

Closest equivalent IFRSs measure: Cash and cash equivalents.

Rationale for adjustment: The Group presents total liquidity as it is a useful measure for evaluating its ability to meet short-term business requirements.

Reconciliation to closest IFRSs equivalent:

US\$000	As at 31.12.19	As at 31.12.18
Cash and cash equivalents	131,020	62,996
Available committed facilities	–	205,000
Total liquidity	131,020	267,996